CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. New York, July 11, 1907.

CONTENTS.

CONSTRUCTION NEWS:
Plans and Specifications on File..... 9
List of Contracts Pending 9
Railways 9
Electric Railways 10
Light and Power Plants..... 10
Bridges 11
Buildings 11
Water Supply and Irrigation..... 12
Sewerage 12
Streets and Roads..... 13
Manufacturing Plants 13
Miscellaneous Contracts 14
Mexico 15
Foreign Contracts and Export News. 15
Contract Prices 15
READERS' WANTS 15
INDUSTRIAL NOTES..... 15
TRADE PUBLICATIONS 15
PROPOSALS 16

CONSTRUCTION NEWS.

PLANS AND SPECIFICATIONS ON FILE.

(* *denotes that this work is advertised in Engineering News.*)

The following Plans (P.) and Specifications (S.) are on file and may be seen at the office of The Engineering News Publishing Co., 220 Broadway, New York:

7-18*Dam, Cincinnati, Ohio 6-20
7-20 Dredging, Charleston, S. C....(S) 6-27
7-20 Blasting, Portsmouth, N. H...(S) 6-27
7-20 Sewers, Pensacola, Fla.....(S) 6-27
7-20 Trav. crane, Bremerton, Wash.(S) 6-27
7-24*Dredging, Jacksonville, Fla...(S) 6-20
7-27 Dry dock, Bremerton, Wash..(S) 5-30

LIST OF CONTRACTS PENDING.

LIGHT, HEAT AND POWER PLANTS.

7-11 Elec. Equip., New York, N. Y... 7-11
7-13 Equipment, Georgetown, Ohio.... 6-20
7-13 Franchise, Ukiah, Cal..... 6-27
7-15 Lights, Bradford, Pa..... 6-27
7-15 Franchise, Fresno, Cal..... 7- 4
7-16*Steam piping, West Point, N. Y.. 6-27
7-15 Lighting, etc., New York, N. Y.. 7-11
7-15 Lighting, Grove City, Ohio..... 7-11
7-18 Wiring, etc., New York, N. Y.... 7-11
7-22 Equipment, etc., New York, N. Y. 7-11
9- 3*Power plant, Winnipeg, Man.... 6-13

BRIDGES.

7-11 Bridge, Redding, Cal..... 7- 4
7-12 Bridges, Indianapolis, Ind..... 6-20
7-12 Bridge repair, Cincinnati, Ohio.. 6-27
7-12 Bridges, Wapakoneta, Ohio..... 6-27
7-12 Bridge, Cincinnati, Ohio 7-11
7-12 Culvert, Cincinnati, Ohio..... 7-11
7-13 Bridges, Bluffton, Ind..... 7- 4
7-13 Bridge work, Cleveland, Ohio... 7- 4
7-13 Bridge, Sidney, Ohio 7- 4
7-15 Bridge, Ukiah, Cal..... 7- 4
7-15 Superstr., Jefferson, Ohio..... 6-27
7-15 Substr., Jefferson, Ohio..... 7- 4
7-15*Bridges, Mt. Pulaski, Ill..... 6-27
7-15*Bridge, New Orleans, La..... 6-13
7-15 Bridge, Atlanta, Ga..... 7-11
7-15 Abutment, San Jose, Cal..... 7-11
7-15 Bridges, San Jose, Cal..... 7-11
7-15 Bridges, Dillon, Mont..... 7-11
7-15 Span, etc., Athens, Ga..... 7-11
7-15 Bridge, Havre, Mont..... 7-11
7-16 Superstr., Mt. Gilead, Ohio..... 7-11
7-16 Bridge, Sandusky, Ohio..... 7-11
7-16 Bridges, etc., Toronto, Ont..... 6-13
7-16*Bridges, etc., Toronto, Ont..... 5-30
7-17*Bridge, Pittsfield, Mass..... 7-11
7-18 Masonry, Kittanning, Pa..... 7-11
7-18 Bridge, Wilkes-Barre, Pa..... 7-11
7-18 Plank, New York, N. Y..... 7- 4
7-19*Bridge, Ft. Snelling, Minn..... 6-13
7-20 Bridges, Porto Rico..... 6- 6
7-20 Bridges, Culpeper, Va..... 6-27
7-20 Bridge, Wawanesa, Man..... 7-11
7-27 Culvert, Cleveland, Ohio..... 7-11
7-27 Bridge, Elberton, Ga..... 7-11
7-29 Bridges, Cleveland, Ohio..... 7-11
7-31*Superstr, Hattiesburg, Miss..... 7- 4
8- 1*Bridge, Woodland, Cal..... 7-11
8- 5 Bridge, Rome, Ga..... 7-11
8- 6 Bridges, Covington, Ind..... 7-11

BUILDINGS.

7-15 Jail, Tuscumbia, Ala..... 7- 4
7-15 Schools, New York, N. Y..... 7- 4
7-15 Bldg. excavation, New York,.... 7-11
7-16 Hospital, Washington, D. C..... 7- 4
7-16*School, Newark, N. J..... 6-13
7-17 Repairs, St. Joseph, Mo..... 6-20
7-18 Court-house, Williamsport, Ind.. 6-20
7-18*Post-office, Chattanooga, Tenn.. 6-13
7-18*Heating, etc., Wilkes-Barre, Pa.. 6-27
7-18 Repairs, etc., New York, N. Y.. 7-11
7-18 Public bath, New York, N. Y.... 7-11
7-19 Sheds, New York, N. Y..... 7-11
7-22 Hospital, New York, N. Y..... 7-11
7-22 Schools, New York, N. Y..... 7-11
7-23 Heating, etc., Indianapolis, Ind.. 7-11
7-24*Post-office, Aurora, Ill..... 6-20
7-25 Building, Dayton, Ohio..... 7-11
7-31*Post-office, Owosso, Mich..... 6-27
8- 1 Plans, Calgary, Alta. 7-11
8- 1 Bank, Knoxville, Tenn..... 7-11
8- 5 Post-office, Crookston, Minn.... 7- 4
8- 7 Cathedral, Halifax, N. S..... 7-11
8-12 Post-office, Mason City, Iowa.. .. 7- 4
8-19*Post-office, Alexandria, Minn.... 7-11
8-20*Post-office, Decatur, Ill..... 7-11

WATER-WORKS.

7-11 Water mains, New York, N. Y... 7- 4
7-12 W.-Works, Bloomer, Wis..... 7- 4
7-13 Canal, Collinston, La..... 7- 4
7-13 Reservoir, etc., Mattoon, Ill..... 7-11
7-15*W.-Works supplies, Checotah, Ind. T. 7- 4
7-15 W.-Works, Eunice, La..... 5-30
7-16 W.-Works, Sayre, Okla. 7- 4
7-16*W.-Works supps., Eufaula, Ind. T. 7- 4
7-16 W.-Works, Comfrey, Minn..... 7-11
7-16 Water mains, New York, N. Y.... 7-11
7-18*W.-Works supps., Commerce, Tex. 7- 4
7-18*Aqueduct, Durhamville, N. Y.... 6-27
7-20*W.-Works, Chesterton, Ind..... 7-11
7-20*Dam, St. Paul, Minn..... 6-27
7-20 Dam, St. Paul, Minn..... 7- 4
7-22*Filter plant, Burlington, Vt..... 7- 4
7-22 Water mains, Randolph, Minn... 7-11
7-23*Water pipe, Irvington, N. Y..... 7-11
7-29*Filters, West Point, N. Y..... 7-11
7-31 W.-Works, etc., North Battleford, Sask. 7-11
8- 1*Water mains, Jamestown, N. Y.. 7-11
8- 6*Dams, New York, N. Y..... 7- 4
8- 6 W.-Works, Speed's Addition, Miss. 7- 4
8- 7 Drainage work, Emmetsburg, Ia. 7- 4
8-19*Plans, Sacramento, Cal..... 5-30
9- 4*Water pipe, New Orleans, La..... 6-27

SEWERS.

7-15 Sewers, etc., Brookings, S. Dak.. 7- 4
7-15 Sewer, Steubenville, Ohio 6-27
7-15 Sewers, Scranton, Pa..... 7-11
7-15 Sewers, Washington, D. C..... 7-11
7-16 Sewers, etc., New York, N. Y.. 7- 4
7-16 Sewers, Cleveland Heights, O... 6-27
7-16*Sewers, Torrington, Conn..... 7- 4
7-16 Sewers, etc., Medina, Ohio..... 7-11
7-18 Drain pipe, New York, N. Y..... 7-11
7-18*Sewers, Woonsocket, R. I..... 7-11
7-19 Sewer, Youngstown, Ohio..... 7-11
7-19*Sewers, Waukegan, Ill..... 7-11
7-20 Sewer, Oshkosh, Wis..... 7- 4
7-20 Sewers, Pensacola, Fla..... 6-27
7-22 Sewer, Willoughby, Ohio..... 6-27
7-22*Sewers, Philadelphia, Pa..... 7- 4
7-22 Septic tank, etc., San Jose, Cal.. 7- 4
7-22 Sewers, Cordele, Ga..... 7-11
7-24 Sewers, Aberdeen, Wash..... 7-11
7-31 Sewers, North Battleford, Sask... 7-11
8- 7 Drainage work, Emmetsburg, Ia. 7-11
9-11*Sewers, etc., New Orleans, La.... 7- 4

STREETS AND ROADS.

7-11 Road, Sullivan, Ind..... 7- 4
7-12 Paving, etc., Richmond, Ind..... 7- 4
7-12 Asphalt plant, Columbus Ohio... 7- 4
7-12 Road, Petersburg, Ind..... 6-20
7-12 Paving, etc., St. Louis, Mo..... 7-11
7-13 Road, Rudolph, Ohio 7-11
7-13 Grading, etc., Cleveland, Ohio... 6-27
7-13 Road, Balls Bluff, Va..... 6-27
7-15 Paving, etc., Cincinnati, Ohio... 6-27
7-15 Paving, etc., Green Bay, Wis.... 6-27
7-15 Macadam, etc., St. Paul, Minn... 7- 4
7-15 Paving, etc., Quincy, Ill..... 7-11
7-15 Paving, Muskegon, Mich..... 7-11
7-16 Grading, etc., New Castle, Ind.... 7-11
7-16 Paving, etc., Buffalo, N. Y..... 7-11
7-16 Highway, Chardon, Ohio 6-27
7-16 Paving, Cleveland Heights, O... 6-20
7-16 Sidewalks, Oak Park, Ill..... 7-11
7-17 Grading,etc., New York, N. Y..... 7-11
7-18 Walks, New York, N. Y..... 7-11
7-18 Road, Spencer, Ind..... 7- 4
7-18*Paving matrl., Wilkes-Barre, Pa. 7- 4
7-19 Paving, etc, Ft. Leavenworth, Kan 7- 4
7-19 Paving, Columbus Barracks, O.. 7- 4
7-19 Paving, New York, N. Y..... 7-11
7-19 Grading, Youngstown, Ohio..... 7-11
7-20 Road, Crawfordsville, Ind..... 6-27
7-20 Pike, Findlay, Ohio..... 6-27
7-22*Paving, Owego, N. Y..... 7-11
7-22 Paving, etc., Jacksonville, Fla.. 7-11
7-23 Highway, Painesville, Ohio..... 7- 4
7-24*Macadam, etc., Harrison, N. Y.. 7-11
7-24 Sidewalks, New Orleans, La..... 6-27
7-25 Paving, New York, N. Y..... 7-11
7-25 Limestone, New York, N. Y.... 7-11
7-26 Road, Tipton, Ind..... 7-11
7-27 Street impvts., Orrville, Ohio.. 7- 4
7-27 Road repair, Cleveland, Ohio.... 7- 4
7-30 Highway, Jefferson, Ohio..... 7-11
7-30 Paving, Hagerstown, Md..... 7-11
8- 1 Roads, Green Castle, Ind..... 7- 4
8- 6*Paving, Sharpsville, Pa..... 7- 4
8- 6 Roads, Covington, Ind..... 7-11

MISCELLANEOUS.

7-11*Creosoted lumber, etc., Charleston, S. C..... 6-27
7-11*Dredging, New York, N. Y..... 6-20
7-12*Seawall, Mobile, Ala..... 6- 6
7-12*Dredging, etc., Albany, N. Y.. 6-27
7-12 River improvement, Albany, N. Y. 6-27
7-12 Truck parts, etc. (Garbage), New York, N. Y..... 7- 4
7-12 Dredging, Seattle, Wash..... 7- 4
7-12*Dredging, Boston, Mass..... 7-11
7-15*Canal, Springer, N. Mex..... 7-11
7-15 Breakwater, Petit Rocher, N. B.. 6-27
7-15*Seawall, New Orleans, La..... 6-13
7-15*Dredging, Urbana, O..... 6-13
7-16 Eng. supplies, Panama..... 7- 4
7-16 Levee, Piggott, Ark..... 7-11
7-16 Rails, Winnipeg, Man..... 7-11
7-17 Steamer repairs, New York, N. Y. 7-11
7-17*Dredging, Block Island, R. I.... 6-20
7-17 Crematory, Ft. Myer, Va..... 6-27
7-18*Dam, Cincinnati, Ohio.....(S) 6-20
7-18 Seawall, New York, N. Y..... 7- 4
7-18 Conduit, Washington, D. C..... 7-11
7-18 Tunnel entrance, Boston, Mass.. 7-11
7-19 Sheds, New York, N. Y..... 7-11
7-19 Paving pier, New York, N. Y.... 7-11
7-20 Dredging, Charleston, S. C..... 6-27
7-20 Trav. crane, Bremerton, Wash.. 6-27
7-20 Blasting, Portsmouth, N. H.... 6-27
7-20*Grading (Rys.), Pensacola, Fla... 7- 4
7-22*Sea wall, Oyster Bay, N. Y..... 7-11
7-23 Wharf repairs, Ft. Morgan, Ala. 7- 4
7-24*Dredging, Jacksonville, Fla..... 6-20
7-24*Dredging, New York, N. Y..... 6-27
7-25 Coal pocket, Charlestown, Mass.. 7-11
7-26*Repairing pier, Holland, Mich... 7- 4
7-27*Dredging, New Jersey..... 6-27
7-27 Dry-dock, Bremerton, Wash.... 5-30
7-29 Dredging, etc., Skagway, Alaska.. 7- 4
7-29 Jetties, Virginia 7-11
7-30*Locomotive, cars, Ft. Monroe, Va. 7- 4
7-30*Extending Ry. track, Virginia.... 7- 4
7-30*Retaining wall, New York, N. Y. 7- 4
7-30*Dredging, New York, N. Y..... 7- 4
7-31*Dredging, Galveston, Tex..... 7- 4
7-31*Barge Canal, Albany, N. Y..... 7-11
8- 1*Canal, Milner, Idaho..... 7-11
8- 1 Ditch, Marshalltown, Iowa..... 7- 4
8- 2 Wharf, etc., San Diego, Cal..... 7- 4
8- 2*Breakwaters, Racine, Wis..... 7-11
8- 3*Pier, Porto Rico 6-20
8- 5*Garbage, etc., Harrisburg, Pa.... 6-27
8- 6 Roads, Covington, Ind..... 7-11
8- 7*Dredging, Porto Rico..... 6-27
8-12*Dredging, Norwalk, Conn..... 7-11
8-20*Wharf, San Diego, Cal..... 6-20

FOREIGN.

7-15 Smelt. materials, Australia 6- 6
7-16 Telegraph material, Victoria..... 6-13
7-30 Railway, Spain 6- 6
7-30 Wharf, Egypt 6-27
7-30 Electric railway, Spain..... 7-11
7-31 Railway material, S. Australia.. 6-13
8- 2 'Phone materials, Australia 6- 6
8- 2 Wharf plans, etc., Sweden..... 5- 2
8- 2 W.-Works, France 7-11
8- 6 Electrical supplies, Australia.... 7-11
8- 7 Hydraulic cranes, England..... 7-11
8-12 Electric railway, Spain..... 7-11
8-13 Locomotives, Australia 6-20
8-14 Elec. equip., Australia 6-27
8-16 Railway, Italy 7-11
9-15 Abattoir plans, France..... 6- 6
12-31 City lighting, India 6- 6

CIVIL SERVICE.

7-13 Electrician, Albany, N. Y..... 6-27
7-17 Asst. Engr., Wash., D. C..... 6-27
7-17 Geodetic Aid, Wash., D. C..... 7- 4
7-18. Elec. Engr. and Dftsman, Wash., D. C. 6-20
7-24 Repairman, Wash., D. C..... 7- 4
7-24 Heat. & Ventil. Dftsman., Wash., D. C. 7- 4
7-29 Mint & Assay Apprent., Wash., D. C. 7- 4
7-31*Asst. Engr., New York, N. Y.... 6-13
8- 2 Chemist, New York, N. Y..... 7- 4

RAILWAYS.

ATLANTIC, QUEBEC & WESTERN.—This company has purchased the road of the Atlantic & Lake Superior, and, it is reported, will extend it westward from the Restigouche Valley, Que., to Edmonton, Alta.; also eastward to Gaspe, Que. Charles R. Scoles, New Carlisle, Que., is Gen. Mgr., A. & L. S. Ry.

BELINGTON & NORTHERN.—The contract for the construction of this railroad from Morgantown, W. Va., to the Pennsylvania state line on the west side of the Monongahela River has been let to the BRADY CONSTRUCTION CO., of Parkersburg, W. Va., and work of grading and laying the track will begin on or before Sept. 1. J. C. Riddell, Parkersburg, W. Va., is Supt.

CANADIAN NORTHERN.—It is said that it is the intention to build a line to Moose Jaw, starting from a point on the Regina-Prince Albert branch. A. E. James, Winnipeg, Man., is Gen. Mgr.; M. H. McLeod, Winnipeg, is Ch. Engr.

CANADIAN PACIFIC.—MACDONELL & GZOWSKI, Vancouver, B. C., have the contract for construction of a 2-mile deviation of the main line at Rogers Pass, at $100,000. F. F. Busteed, Vancouver, is Gen. Supt.; H. B. Walken, Vancouver, is Res. Engr.

CHESAPEAKE & OHIO.—Engineers are surveying for an extension along Johns Creek toward Craig Healing Springs. H. Pierce is Engr. of Construction at Richmond, Va.

CHICAGO SOUTHERN.—Capital has been secured and construction work will begin at once on this road, under the supervision of John R. Walsh.

CHICAGO & ILLINOIS WESTERN.—An application has been made by this company to the Chicago Drainage Canal Board for permission to construct tracks along portions of the canal between Chicago and Summit. The company proposes also to lease 24 acres of the canal property. The road is being built by Dolese & Shepard Co., crushed stone manufacturers. D. P. Plummer, Chicago, is Gen. Supt.

DEMOPOLIS & LINDEN.—Survey has been made and right-of-way has been secured from Demopolis to Linden, Ala., 16 miles. Henry McDaniel, Demopolis, Ala., is one of the promoters. Noted on June 13.

FENTRESS COUNTY.—It is proposed to build from Johnson Stand, on the Tennessee Central, via Jamestown, Tenn., to Monticello, Ky., about 68 miles. Fentress County will vote about August 31 on $50,000 of railroad bonds. W. W. Wood is Pres.; Ward R. Chase, Secy., and T. J. Wright, Treas. Noted on June 27.

FLORIDA CENTRAL.—Company has been granted a charter to build a line from Thomasville to the Florida State boundary, 13 miles. The incorporators are J. L. Phillips, J. S. Gordon, R. S. Pardee, Charles P. Phillips, Jr., C. W. Hudson, E. R. Phillips, J. W. Bonnell, B. H. Wright, E. M. Mallette and E. M. Smith, all of Thomasville, Ga.

GRAND TRUNK PACIFIC.—Contracts have been let to F. A. CONNOR, of Portage la Prairie, Man., for building the road through that city, and to A. B. McCRIMMON, Edmonton, Alta., for the Edmonton-Clover Bar section of the main line. B. B. Kelliher is Ch. Engr., Montreal, Que.

LORAMA R. R.—Right-of-way has been secured, it is stated, for the proposed extension from Goose Neck to Pullman, W. Va., five miles, and contracts for material will be let soon. M. K. Duty is Pres., Pennsboro, W. Va.

NEBRASKA, KANSAS & SOUTHERN.—F. T. Burnham, Beloit, Kan., Secy., advises us that survey is being made and part of right-of-way secured for proposed line between Superior, Neb., and Garden City, Kan., 250 miles. Contracts will be let in the fall. Baxter L. Brown is Ch. Engr., 502 Laclede Bldg., St. Louis, Mo. Noted on May 23.

NEW IBERIA, ST. MARTIN & NORTHERN.—We are officially advised that this company has completed surveys, and construction will commence in a few days. The line will follow the east side of Bayou Teche from New Iberia, La., north to Port Barre, where a connection will be made with the Opelousas, Gulf & Northeastern, a part of the Texas & Pacific system. F. M. Welsh is Pres.; A. B. Romero, Secy., and L. A. Sumnerc, Ch. Engr.

PENSACOLA, ALABAMA & GEORGIA.—Application has been made for a charter to build a line from Pensacola to a point on the Alabama State line, about 50 miles, and thence into Alabama. Capital, $10,000. The incorporators are: O. L. Bass, Pres.; J. G. Pace and M. E. Clark, Vice-Pres.; J. S. Reese, Secy. and Treas.; H. L. Berry, G. C. Scudamore, E. E. Reese, A. B. Wood and J. H. Smithwick, all of Pensacola, Fla., and W. C. Vereen, Pres. of the Natural Bridge Ry., of Moultrie, Ga. All are directors.

PHILADELPHIA & READING.—Surveys are being made, it is said, for a new line from Mingo, Pa., around the Phoenixville tunnel, to strike the main line near Phoenixville, giving the road four tracks from Mingo to Perkiomen Junction. William Hunter, Philadelphia, is Ch. Engr.

PITTSBURG, BINGHAMTON & EASTERN.—This company, which is now constructing a line from Clearfield, Pa., to Binghamton, N. Y., will also build two branches, one from Phillipsburg, Pa., to the Cambria County line, about 20 miles in length, and another branch 32 miles in length, to Oregon Hill. H. A. Schwanecke, Canton, Pa., is Ch. Engr.

SAVANNAH & SOUTHWESTERN.—We are advised by H. R. Brown, Vice-Pres., Macon, Ga., that this company will construct a railroad from Savannah to St. Andrews Bay, Fla., on the Gulf of Mexico, 350 miles, passing through Douglas, Moultrie, Cairo, Ga., and Quincy, Fla., crossing the Altamaha and Apalachicola Rivers. Surveys have been made and part of the right-of-way obtained. The grades will be about 75% and the curves low. The general contract has been let to the FINANCE CONSTRUCTION CO., Savannah, which will let sub-contracts in about two months. D. B. Dunn, Macon, is Engr. Noted on June 6.

SOUTHERN PACIFIC.—Company intends to build a double track from Reno, Nev., to Roseville over the Sierra Nevada Mountains in order to handle its rapidly increasing traffic quickly. W. S. Palmer is Gen. Supt., San Francisco; W. Hood is Ch. Engr.

STATESVILLE AIR LINE.—It is proposed to build from Lincolnton, N. C., on the Seaboard Air Line, to Mount Airy, N. C., Radford, Va., and Salem, Va., and thence to a connection with the Baltimore & Ohio, altogether 213 miles. The section from Statesville to Mount Airy, 65 miles, is to be completed first. Subscriptions to preferred stock are being received to make preliminary survey. The other officers are: W. D. Turner, Pres.; William Wallace, Vice-Pres.; P. C. Carlton, Secy.; D. M. Ausley, Treas.; N. B. Mills, Chn of the Executive Com. The directors include those named above, besides M. K. Steele, Turnersburg, N. C.; Dr. J. J. Motts, Statesville, N. C.; J. H. McElwee, Statesville; T. J. Jennings, Jennings, N. C.; D. M. Reese, Yadkinville, N. C., and P. B. Kennedy, Daltonia, N. C.

TAYLOR, SOMERVILLE & HOUSTON.—Under this name a company has been organized and will apply for a charter for a proposed road from Taylor to Houston, Tex. The directors include J. A. Thompson, of Taylor, and J. R. Lyons, of Somerville, Tex.

TEXAS SOUTHERN.—George I. Walker, writes that it is expected to begin construction in about 60 days on an extension from Winnsboro to Paris, Tex., 60 miles. George I. Walker is Supt. of Construction, Marshall, Tex.

TRANS-CONTINENTAL.—Four bids were received by the Trans-Continental Ry. Commission for construction of eight miles of road from a point near Chipman, N. B., eastward toward Moncton, from the Grand Trunk Pacific, M. J. O'Brien and Z. J. Fowler, Ottawa; W. Kitchen Co., Fredericton, N. B., and J. W. McManus Co., Memramcook, N. B. H. D. Lumsden, Ottawa, Ont., is Ch. Engr.

WELLINGTON & POWELLSVILLE.—This road, narrow-gage, is to be extended from Ahoskie to Windsor, N. C., 22 miles. The road is used chiefly for lumber purposes, but also does a general freight and passenger business. H. T. Walters, Ahoskie, N. C., is Supt.

ELECTRIC RAILWAYS.

PROVIDENCE, R. I.—The Rhode Island Co. proposes to build about 11,700 ft. of track on the Cranston cross town line, and will extend its present Academy Ave. line about 2,750 ft. It is stated that a new car house will be built on Thurber Ave.; one on Academy Ave., and the present Social St. car house in Woonsocket will be rebuilt. In addition to this, an addition of about 8,100 sq. ft. will be built to the repair shop. A. E. Potter is Gen. Mgr.

HEMPSTEAD, N. Y.—The State Railroad Commission has authorized the construction of the Sea Shore Municipal Railway, which is to run from Hempstead through Rockville Center to East Rockville, a distance of five miles, all in Nassau County. The capital of the company is $150,000.

LONG ISLAND CITY, N. Y.—A certificate of necessity has been granted by the State Board of Railway Commission to the Queens Borough Street Railway Co. for an electric railway to run along Van Alst Ave., Astoria, from the present center of the district, at Flushing Ave., through East River Heights, to the new settlement of the Astoria Light, Heat & Power Co. The line will be less than a mile in length, and for 3,000 ft. will run through the property of the Rickert-Finlay Realty Co., whose officers comprise most of the board of directors. It will be an independent company, but will either extend its line down to the 92d St. Ferry or arrange for transfers to that point, only six blocks distant. In either case, the time from East River Heights to the ferry will be only five minutes. The road's application for a franchise has been filed with the Bureau of Franchises, New York City.

ALBANY, N. Y.—The United Traction Co. has filed with the Secretary of State four certificates of extensions of its road covering the additional lines on Western Ave. to the west lines of the city, and on the former Great Western Turnpike road in the town of Guilderland; also the Arbor Hill extension on Ten Broeck St. and Livingston Ave. to New York Central Ave. Also in Troy on Spring Ave., Hill St. and Jefferson St.; and on Sixth Ave. and 15th St., Watervliet. Edgar S. Fassett, Albany, is Gen. Mgr.

ROCHESTER, N. Y.—We are officially advised that the Buffalo, Genesee & Rochester Ry. begins at the village of Depew at the easterly terminus of the Buffalo & Depew Ry. The line continues easterly through villages of Corfu, Batavia and Le Roy to Rochester a distance of 55 miles. About half way between Batavia and Rochester a branch five miles in length will run into the village of Le Roy. The Buffalo & Depew Ry. is a double track line seven miles in length. From the easterly line of the city of Buffalo to the westerly line of the city of Rochester will be therefore, by this route, 62 miles. A double track, high speed line will be built, the maximum grade on the main line to be 2%. Between Depew and Batavia there are no curves and after leaving Batavia the line is practically a tangent to Rochester. The road will be built in private right-of-way except where it passes through the main street of Batavia. The village of Batavia is half way between Buffalo and Rochester. Certificate and permission to mortgage was granted to this company by the Railroad Commission about the middle of June and construction of roadbed was begun June 28. H. H. Kingston, Philadelphia, is Pres.; George A. Ricker, 702 Ellicott Sq., Buffalo, is Ch. Engr. Noted last week.

PITTSBURG, PA.—The Pittsburg & Butler Street Railway Co. has decided that the entire line will be double tracked soon. This company also announces that an extension nine miles in length will be built at once from the Thorn Creek Viaduct, near Renfrew, to Saxonburg. The surveys have been completed, and the new line will be free from grades and curves. George Heard is Pres., and Hudson F. Layton is Ch. Engr. The Pittsburg offices of the company are in the Vandergrift Building, on Fourth Ave.

IRWIN, PA.—The Manor Valley Ry. Co. proposes to let contracts during the next three weeks for construction of an extension four miles in length, to the Pittsburg & Westmoreland Railway Co.

BRADFORD, PA.—The Western New York & Pennsylvania Traction Co. will construct an electric line from Eldred, Pa., to State Line, Pa., which will connect with the Bradford-Olean line. It is stated that it is the intention of the company to construct a line from Bradford to Carrollton to connect with the Olean and Salamanca lines. It was proposed to rebuild the entire system in the city of Bradford on paved streets, as well as rebuild and extend the Lewis Run line. W. R. Page is Gen. Mgr.

CARDINGTON, PA.—The Philadelphia Rapid Transit Co. is making arrangements to construct a double-track system from Cardington to Collingdale. The company has obtained the right-of-way from Cardington to Marshall Road, in Upper Darby Township, to a point near Lansdowne Borough. It is reported that the company contemplates running through Upper Darby Township into the Borough of Clifton Heights, thence to Aldan Borough, continuing to Collingdale Borough.

BALTIMORE, MD.—Carville D. Benson, of the firm of Benson & Karr, Attys. for the Baltimore, Halethorpe & Elkridge Electric Railway Co., has secured the right-of-way for the new railway from Baltimore to Halethorpe. The promoters propose that the work of grading and laying the tracks should begin this fall. The right-of-way already secured extends for about 2¾ miles. The line starts at the terminus of the Wilkens Ave. route of the United Railways, and crosses the tracks of the Pennsylvania R. R. The road will run parallel to the railroad and from 400 to 600 ft. to the west of it to Francis Ave., Halethorpe. Oregon R. Benson is Pres.

WINCHESTER, VA.—Plans are now under consideration by the Winchester & Washington City Ry. Co. for the construction of an electric railway between this place and Washington by way of Bluemont. The following is a list of directors of the company who have been re-elected: S. H. Hansbrough, Winchester, Pres.; Charles Milliken, Clarke County, Vice-Pres.; Shirley Carter, Winchester, Secy.; S. L. Hoover, Winchester, Gen. Mgr. Executive Committee, S. H. Hansbrough, Charles Milliken and Lewis Cooper, of Winchester; Supt., D. M. Swink. H. C. Warden has been elected a director.

JACKSON, GA.—Engineers are at work on the survey for connecting the old roadbed between Jackson and Griffine with graded roadbed from Eudora to Social Circle for the Middle Georgia Interborough Ry. Co. Captain W. F. Smith, who has for some time been working on the right-of-way, will direct the party. There are 30 or 35 miles of the line already graded.

ATLANTA, GA.—The Atlanta, Griffin & Macon Electric Ry. Co. will begin work soon on the line from Atlanta to Macon. Surveys have been completed and right-of-way is being secured. The companies interested in the project are the Georgia Securities Co., which is building the road, and the Atlanta, Griffin & Macon Electric Railway Co. Both companies are composed of Georgia capitalists. Of the first company, Clifford L. Anderson, of Atlanta, is Pres.; W. J. Massey, of Macon, is Vice-Pres.; Alfred Boylston, of Atlanta, Sec. and Treas., with the following directors: W. J. Massey, Clifford L. Anderson, J. Wilie Pope, W. A. Wimbish, of Atlanta; W. J. Kincaid and Seaton Grantland, of Griffin, and John T. Moore, of Macon. The interurban has the same directors, and the officers are W. J. Kincaid, Pres.; W. J. Massey, Vice-Pres.; W. A. Wimbish, Treas., and C. L. Anderson, Secy.

CHATTANOOGA, TENN.—The Chattanooga Railways Co. will construct an electric railroad to the summit of Lookout Mountain. Other improvements of an extensive nature are to be made by the company immediately. Surveys have been made for a line to Lula Lake and Minnehaha Falls, at which point it is proposed to put in a park. D. J. Duncan is Gen. Mgr.

COLUMBUS, OHIO.—The Defiance, Hicksville & Fort Wayne Ry. Co., electric, capital $10,000, has been incorporated by W. E. Golding, H. C. Eplert, M. O. Topliff, E. A. Murphy and M. I. Brown.

TERRE HAUTE, IND.—The Terre Haute & Metom Ry. Co., which was recently incorporated in Indiana, will let contracts within two or three months for building its proposed electric line from Terre Haute, Ind., south via Princeton, Middletown, Fairbanks and Graysville to Merom, about 35 miles. L. Brown is Pres., Fifth and Main Sts., and J. Caswell, Ch. Engr., Terre Haute, Ind.

GRAND RAPIDS, MICH.—We are officially advised that the Grand Rapids Electric Railway Co., of Grand Rapids, will let contracts immediately for construction of a railway between Grand Rapids and Saginaw and Bay City. The line will be 157 miles long, passing through Greenville, Langston, Stanton and Alina. Surveys have been finished and right-of-way and capital secured. The work will be largely gravel and sand loam. Both electricity and steam will be used on this road. C. J. Post, Grand Rapids, is Secy.; J. W. Boynton, Grand Rapids, Pres., and George W. Doane, Ch. Engr.

CARLYLE, ILL.—The survey for the proposed electric railway to be built from this city to Lebanon for the Carlyle & St. Louis Electric Ry. Co. will soon be completed. All of the work has been done, excepting a few changes in the route. It is stated that it is the intention to run the road on the north side of the Baltimore & Ohio Southwestern R. R. and as near to the right-of-way as possible. The line will be diverted west of Trenton so as to run through the center of the city, and will reach the right-of-way again east of the city.

MILWAUKEE, WIS.—The Milwaukee Electric Railway & Light Co. will begin the construction of an interurban line through Wauwatosa to Brookfield, Pewaukee, Hartland, Nashotah and Oconomowoc next spring, or as soon thereafter as possible. The extension of the Waukesha line from Waukesha Beach to Watertown is expected to be in operation early next spring. By next spring the extension of the Muskego Lakes line to Mukwonago and East Troy in one direction, and to Wind Lake and Waterford in the other, will also be completed. As soon as these extensions are finished it is said to be the intention to begin work on the new line to Oconomowoc. The new line to the lakes and also one to Menomonee Falls are reported to be fully surveyed, and to be awaiting the completion of extensions already started before being built. C. J. Davidson is Ch. Engr.; John I. Beggs is Pres. and Gen. Mgr.

MAQUOKETA, IOWA.—We are advised by John A. Tracy, Maquoketa, Secy. Eastern Iowa Traction Co., that an electric railroad is to be constructed between Davenport and Dubuque, via Maquoketa, all in Iowa. The line will be about 80 miles long; surveys have been made, and much of the right-of-way obtained. Franchises have been granted the company by five cities and towns. A. Hurst, Maquoketa, is Pres.; S. H. Moore, 51 Whittaker Bldg., Davenport, Iowa, is Ch. Engr.

COFFEYVILLE, KAN.—We are advised by F. B. Shirley, Pres. Kansas Traction Co., Coffeyville, that this company intends to build an electric railroad from Coffeyville to Kansas City, Mo., via Lawrence and Topeka, 225 miles. The work will be all new, low grade, mostly heavy, with 50 miles medium construction. Surveys will be completed about Oct. 1, when contract probably will be let. Right-of-way is being obtained.

MOUNTAIN GROVE, MO.—The Secretary of State has issued a charter to the St. Louis, Mountain Grove & Southern Ry. Co. of Mountain Grove, Mo. The capital stock is $300,000. The road is to be 30 miles long, extending from Mountain Grove, Wright County, to Bryant Creek, Ozark County. J. J. Hedges, J. H. Jarrett, E. L. Richardson, of Springfield; J. Allbands, of St. Louis, and P. M. Johnston, of Elmo, Ill., are Directors.

GALLATIN, MO.—Frank Clark, of Hamilton, Mo., writes us that surveys will be started soon for the proposed electric road to connect Gallatin and Excelsior Springs. No company has been formed as yet. Those interested are A. J. Ogden, J. D. Giddings, J. W. McLean, of Hamilton; S. C. Rogers, C. W. M. Love and Quinby James, of Kingston, Mo. W. B. Rollins, Kansas City, Mo., is Engr.

ST. CHARLES, MO.—W. A. Dillon, Marling, Montgomery Co., Mo., advises us that it is proposed to construct an electric railway between St. Charles and Vandalia, 80 miles. The line will run mostly through Prairie County.

HOT SPRINGS, ARK.—Surveyors have begun locating the right-of-way for the 6-mile scenic railway which is to connect Hot Springs and the "White City," to be located near the old Essex Park race track. The date of the completion of the road and the opening of the park has been set for Jan. 5, 1908.

RUSSELLVILLE, ARK.—Adam J. Robinson, Pine Bluff, Pres. of the Southern Engineering & Construction Co., which has been granted a 50-year franchise in Russellville for an electric railway and for a light and power plant, advises us that it is proposed to construct an electric road from the Arkansas River north to Dover, Ark., 15 miles. Surveys are complete and right-of-way has been obtained. Part of the capital has been secured. Work has been started upon the power plant. Edwin Cook, Pine Bluff, is Ch. Engr.

TULSA, IND. T.—J. Robert Bernham, C. E., Box 152, Tulsa, informs us that he has been engaged to estimate the cost of constructing an electric railway, about 25 miles long, from here to the Glen Pool oil fields. He desires prices on equipment.

ROCKPORT, WASH.—Engineers of the Cascade Valley Ry. Co., under L. M. Rice, of Seattle, are working on final location of the projected electric line from Rockport through the Cascade Pass. It is stated that construction will commence within two or three months. W. A. C. Rouse is Pres.

HILLSBORO, ORE.—The City Council of Hillsboro has granted franchise to the Oregon Electric Ry. Co. on Base Line St. and also to the United Railways Co. for franchise by way of Main St. with right to use First, Second or Third Sts. for connection with southern limits of the city. The Oregon Electric Ry. Co. agrees to complete main line into Hillsboro within three months and complete road into Portland by December 31, 1908. The United Railways Co. agrees to have line into this city completed within one year and to Portland within two years.

SAN DIEGO, CAL.—Construction work on the line of the Point Loma Electric Railway, from Winder and Indian Sts. across the flats, through Roseville and over Point Loma to Ocean Beach, is to be started immediately. The grading is already in progress.

FRESNO, CAL.—H. E. Huntington, of the San Joaquin Light & Power Co., proposes to expend about $3,000,000, it is reported, on electric railroad between Fresno and the Yosemite Valley. Surveys have been completed by way of Crane Valley, a distance of 96 miles. Mr. Huntington intends having a system with Fresno as the center. The San Joaquin Power Co. will furnish the necessary motive power. Samuel M. McLenegan, formerly of the Huntington system in Los Angeles, has been appointed Gen. Mgr. of the new traction company.

LIGHT AND POWER PLANTS.

(denotes that this work is advertised in Engineering News.)*

UTICA, N. Y.—Under the recent decision of the State Gas and Electric Commission, the merger of the Herkimer County Light, Heat & Power Co. with the Utica Gas & Power Co., the Utica Gas & Electric Co. is permitted to acquire all the stock of the Herkimer County Light, Heat & Power Company, of the Glens Falls Gas & Electric Co. and of the Consolidated Gas & Electric Co., of Whitehall. It also authorizes the Utica company to acquire 51 per cent. of the stock of the gas and electric companies of Sandy Hill, Fort Edward and South Glens Falls. The Utica Gas & Electric Co. thus extends into a territory, taking all the Mohawk River towns in Herkimer County, and extends as far north as Dolgeville, with a population of 60,000, to which gas and electricity will be furnished. The company is authorized to issue a mortgage not to exceed $5,000,000 at five per cent. for refunding and extensions. Of this amount $2,000,000 will be issued at once. The company is now building a gas holder in Utica which will contain 2,000,000 ft. of gas. A pipe line for gas will be constructed eastward to Little Falls. The company expects to make extensions also to Ilion, Mohawk, and Herkimer. An electric transmission line will be constructed by the company from Trenton Falls to Rome; and the gas and electric service in Glens Falls, Sandy Hill, Fort Edward and Whitehall will be increased. When these improvements are under way, the company expects to take steps to further develop its water power, and there will be an increase in the Dolgeville water plant.

NEW YORK, N. Y.—Bids are asked by the Department of Charities, Robert W. Hebberd, Comr., until 2.30 p. m., July 22, for furnishing materials required for the electrical conduit, electric wiring and switchboard work, heating work, plumbing work, gas piping and all other work, for erection and completion of day room for male inmates and day room for female inmates, reception pavilion for male inmates and reception room for female inmates, and operation pavilion in connection with the Home for the Aged and Infirm, Blackwell's Island; furnishing materials required for gas and electric fixtures and fitting up, and all other work for erection and completion of day room for male inmates and day room for female inmates, reception pavilion for male inmates and reception pavilion for female inmates, and operation pavilion in connection with the Home for the Aged and Infirm, Blackwell's Island.

Bids are asked by the Department of Public Charities, Robert W. Hebberd, Comr., until 2.30 p. m., July 18, for furnishing materials required for the complete conduiting, electric wiring and all other work in connection with installation of complete electric lighting and power system for all buildings and grounds under the jurisdiction of the Department of Public Charities, and comprising the Metropolitan Hospital District, Blackwell's Island, Borough of Manhattan.

NEW YORK, N. Y.—Bids are asked by the Armory Board, George B. McClellan, Chr., until 2 p. m., July 15, for furnishing and installing electric lighting fixtures, etc., in Twelfth Regiment Armory, Borough of Manhattan.

NEW YORK, N. Y.—Bids are asked by C. B. J. Snyder, Supt. School Bldgs., until 11 a. m., July 22, for installing electric equipment in addition to and alterations in Public School No. 29, on west side of Washington St., between Albany and Carlisle Sts., Boro. of Manhattan; also for installing electric equipment in addition to and alterations in Public School No. 14, 225 East 27th St., Boro. of Manhattan.

CREIGHTON, PA.—The Allegheny Valley Street Ry. Co. will double the capacity of its power plant. Estimated cost, $350,000.

NEW CASTLE, PA.—The Pennsylvania Co., Lines West of Pittsburg, will build electric lighting plant and roundhouse, which will together cost about $375,000. The electric plant will be of sufficient capacity to furnish light for the yards of the Pittsburg, Youngstown & Ashtabula R. R., and the Pittsburg and Erie divisions of the Pennsylvania Company, Lines West.

BALTIMORE, MD.—Hochschild, Kohn & Co., department store, Lexington and Howard Sts., will erect power-house in the rear of its store building. A. Lowther Forrest, Professional Bldg., 330 North Charles St., is Arch.

PETERSBURG, VA.—The Virginia Passenger & Power Co. will expend about $50,000 in installation of arc lights for street illumination and improvements to power plant.

GRAFTON, W. VA.—The Board of Regents, West Virginia University, has awarded contract at about $50,000 to ALEX. ZECK & SON for installation of central heating plant.

WILMINGTON, N. C.—The Tidewater Power Co., R. M. Sheppard, Secy.-Treas., will take over the Consolidated Railways Light & Power Co. It is proposed to make extension into suburbs of city, transmitting electric power from plant of the Rockingham Power Co., a distance of 116 miles.

RALEIGH, N. C.—The Agricultural & Mechanical College has given contract to the GREENSBORO BOILER & MACHINE CO., of Greensboro, N. C., for 125-HP. Skinner automatic engine to operate Crocker-Wheeler dynamo, which will be direct-connected. This machinery is for the heating, lighting and power plant for the college.

TRYON, N. C.—The Tryon Electric Light, Water & Power Co., Todd Russell, Gen. Mgr., is preparing to erect a power plant on Pacolet River. Estimated cost, $65,000.

NEWNAN, GA.—R. D. COLE MANUFACTURING CO. has secured contract to build power-house for the city electric light plant.

ST. PETERSBURG, FLA.—Walter Howard Robertson, William J. Siemmer and John G. Lewis have secured 20-year franchise to build and operate gas plant.

MOBILE, ALA.—Mobile Light & Railroad Co., J. H. Wilson, Pres. and Mgr., is having plans prepared by Sanderson & Porter, of New York, for improvements at power station for doubling present capacity. It is proposed to erect boiler-house of steel, brick and concrete, to be equipped with two 500-HP. boilers, coal-handling apparatus, telpher system, 1,800-HP. cross-compound engine and 1,200-kilowatt general electric generator. About $100,000 will be expended on equipment.

FRANKLIN, LA.—Contract has recently been let to MURALT & CO., 114 Liberty St., New York, for constructing municipal electric light plant.

BRISTOL, TENN.—Charles Hall Davis, and associates, of Petersburg, Va., who are interested in the development of water-power on Holston River, 10 miles from Bristol, plan to build 60-ft. dam and develop 4,000 HP. The company, which recently organized with J. D. Mitchell, Pres., W. L. Halstead and J. B. Baumgardner, Vice-Presidents, and Theodore Swann, Secy.-Treas., will distribute the power after it has been developed. Charles Hansell & Co., New York, N. Y., are Engrs.

RUSKIN, TENN.—The Ruskin Real Estate Co., recently incorporated with capital of $20,000, contemplates erecting electric light plant.

GROVE CITY, OHIO.—Bids are asked by Will C. Merritt, City Clk., until 7 p. m., July 15, for lighting the streets for period of one year.

GOSHEN, IND.—Bids will soon be asked by the City Council for construction and equipment of electric light plant.

FT. WAYNE, IND.—All bids received for constructing municipal lighting plant have been rejected, and new bids will be asked.

STEPHENS, ARK.—The Stephens Light & Power Co. will erect electric light plant. M. L. Milner is Gen. Mgr.

PLAINVIEW, TEX.—The Plainview Electric Light & Motor Power Co. has been incorporated with $5,000 capital stock by T. W. Morrison, J. N. Morrison and R. E. Burch, for constructing electric light and power plant.

WACO, TEX.—Jos. J. Henry and associates, of New York, are planning to generate electricity at the lignite coal mines in Robertson and Milan Counties, about 60 miles from Waco, and conduct current by wire to Waco and other cities, probably as far as Houston, Texas, for light and power purposes. Mr. Henry has been granted 50-year franchise by Waco and concessions by other towns and cities.

RED FORK, IND. T.—We are officially advised that a power-house will be constructed at Red Fork, in connection with the electric line to be constructed from Tulsa to the Glen Pool oil fields. J. Robert Burnham, of Tulsa, is Engr.

NORTH BEND, ORE.—The City Council has granted 30-year franchise to the Hewitt-Bell-Simpson syndicate for construction, operation and maintenance of gas and electric plant.

BONANZA, ORE.—The City Council has accepted proposition of Chas. S. and Rufus Moore to install light and power system, to be operated by transmission line from station at Klamath Falls.

NORTH BATTLEFORD, SASK.—See under Water Supply-Irrigation.

LLOYDMINSTER, B. C.—The CANADIAN FAIRBANKS CO. has secured the contract for constructing Fairbanks-Morse gas producer electric light plant of 100-HP. capacity.

BRIDGES.

(* *denotes that this work is advertised in Engineering News.*)

*PITTSFIELD, MASS.—Bids are asked until 2 p. m., July 17, by the Board of Public Works, for building a concrete arch bridge across Housatonic River, at Mill St., Pittsfield. Louis B. Cummings is Clerk.

NEW YORK, N. Y.—The following bids were received July 2 by the Department of Bridges, James W. Stevenson, Comr., for furnishing and delivering lumber for the Williamsburgh (New East River) Bridge: A. C. Jacobson & Son, 81 Bridge St., Brooklyn, $10,835; John C. Orr Co., West St., Brooklyn, $10,826, and Young & Bros., $11,535.

NEW YORK, N. Y.—We are officially advised that the following bids were received by James W. Stevenson, Comr. of Bridges, for cutting recesses and wells for additional anchorage in the west and east anchor piers of the Blackwell's Island Bridge over the East River, between the Boroughs of Manhattan and Queens: Haggerty Construction Co., 215 West 125th St., $14,921; Williams Engineering & Contracting Co., 13 Park Row, $5,205; Snare & Triest Co., 143 Liberty St., $24,440.

YORK, PA.—The Wrightsville & York Street Ry. Co. will replace present bridge over Kreutz Creek, near Stony Brook, with structure having 25-ft. span.

ALIQUIPPA, PA.—The Baden & Aliquippa Bridge Co. has been formed to build bridge from Baden across Ohio River to Aliquippa, a distance of 3,000 ft. Address W. J. Mellon, Aliquippa, Pa.

KITTANNING, PA.—Bids are asked by the County Commissioners, Benjamin Oswald, Clk., until 10 a. m., July 18, for masonry work in connection with bridges over Sugar and Pine Creeks.

WILKES-BARRE, PA.—Bids are asked by James M. Norris, County Controller, until 2 p. m., July 18, for reconstructing bridge over Mill Creek.

MONACA, PA.—The Vanport & Bellowsville Bridge Co. has been formed to build bridge from Beaver County across Ohio River to a point near Monaca. Address J. Sharp Wilson, Monaca, Pa.

BEAVER, PA.—The Pittsburgh & Lake Erie R. R. Co. have prepared plans for replacing the bridge across Ohio River at Beaver. The bridge is to cross the river diagonally, starting on the Beaver side 200 ft. east of the old structure. The shore pier on the West Virginia bank of the river will be 500 ft. upstream from the old bridge. The channel span is to be 767 ft. long or 700 ft. in the square. The height of 531 ft. of this span is to be 90 ft. above low water. Beginning 118 ft. from each channel pier, the lower chord will drop 19 ft. to the pier. J. A. Atwood, Pittsburg, Pa., is Ch. Engr. Bridges and Roadway.

BENTLEYVILLE, PA.—The County Commissioners have let contract to T. O. TINLEY, of Bentleyville, for repairing bridge over Pigeon Creek.

CHARLTON, MD.—The County Commissioners have let contract to the NELSON CONSTRUCTION CO., of Chambersburg, for constructing reinforced concrete bridge across Little Conococheague River, at $2,817.

RICHMOND, VA.—The Richmond & Henrico Ry. Co. will construct viaduct from Twelfth and Broad Sts. to Church Hill.

ELBERTON, GA.—Bids are asked by Elbert and Wilkes Counties until July 27 for constructing steel bridge across Broad River at Bells Ferry.

ATHENS, GA.—Bids are asked by the Board of Commissioners of Roads and Revenues, James Barrow, Clk., until July 15, for repairing sub-structure and constructing 147½-ft. span across Oconee River.

ROME, GA.—Bids are asked by the Board of County Commissioners, J. F. Hillyer, Clk., until noon, Aug. 5, for constructing 60-ft. span steel truss bridge across Silver Creek.

ATLANTA, GA.—Bids are asked by the Board of Commissioners of Roads and Revenues, James Barrow, Clk., until noon, July 15, for constructing steel bridge across Oconee River.

JACKSONVILLE, FLA.—The Atlantic & East Coast Terminal Co. has let contract to the VIRGINIA BRIDGE CO., Atlanta, Ga., for constructing plate girder bridge with 107-ft. span. J. W. Richardson is Engr.

KNOXVILLE, TENN.—The County Court has let contract for steel work on the Tennessee River bridge to W. A. PARK, for $25,323. The U. S. WOOD BLOCK CO. secured the contract for paving the bridge with wood blocks, at $3.30 per sq. yd. L. C. Carter is Consult. Engr.

MOSCOW, KY.—The County Courts of Fulton and Hickman Counties have let contract to the VINCENNES BRIDGE CO., Vincennes, Ind., for constructing bridge at Moscow.

FINDLAY, OHIO.—A bridge, 180 ft. long, will be constructed across Blanchard River in Dukes Settlement, Blanchard Township.

LORAIN, OHIO.—Plans are being prepared by the County Surveyor for constructing five arch concrete bridges over Rocky River. Cost, $180,000.

MT. GILEAD, OHIO.—Bids are asked until July 16 for construction of superstructure of steel bridge over Whetstone Creek, Washington Township. W. C. McFarland is County Audr.

DAYTON, OHIO.—The Board of Public Service has let contract to J. C. MORRISON, at $4,100, for constructing the temporary Dayton View bridge, using as much second-hand material as practical.

CINCINNATI, OHIO.—Bids are asked by the Board of County Commissioners, Fred. Dreihs, Clk., until noon, July 12, for constructing reinforced concrete bridge and approaches, on Ohio Pike, Anderson Township.

CINCINNATI, OHIO.—Bids are asked by the County Commissioners, Fred. Dreihs, Clk., until noon, July 12, for constructing 5-ft. circular concrete culvert on Montgomery Pike, Sycamore Township.

COLUMBUS, OHIO.—The contract for constructing roadway, sidewalks, etc., of the Leonard Ave. viaduct, has been let to SHILLING BROS., at $12,863; GEIGLE & GAINES have secured contract for constructing approaches, at $8,907, and J. A. FEBINGLE secured the contract, at $20,819, for constructing the substructure.

CLEVELAND, OHIO.—Bids are asked by the Board of County Commissioners, Julius C. Dorn, Clk., until 11 a. m., July 29, for constructing and repairing bridges on Bainbridge Road.

Bids are asked by the Board of County Commissioners, Julius C. Dorn, Clk., until 11 a. m., July 27, for constructing concrete steel culvert in Chagrin Falls Township.

SANDUSKY, OHIO.—Bids are asked by the Board of County Commissioners until 1.30 p. m., July 16, for constructing bridge over Mills Creek, at Monroe St., Sandusky. Charles Kuboch is County Audr.

COVINGTON, IND.—Bids are asked by the Commissioners of Fountain County until noon, Aug. 6, for bridges as follows: two 100-ft. spans, one 90-ft. span, one 70-ft. span, two 60-ft. spans, one 26-ft. span, one 18-ft. span. Each of the above to have concrete abutments; abutments to be let separate or with the bridge. W. B. LaBaw is Engr., Veedersburg, Ind.

TEKONSHA, MICH. — The Townships Boards of Tekonsha and Burlington have let contract for constructing bridges on line between Burlington and Tekonsha, to the ILLINOIS BRIDGE CO., for $3,000.

DE PERE, WIS.—We are officially advised that George P. Hawley, Consult. Engr., De Pere, is preparing plans for three highway bridges for Brown County.

PIPESTONE, MINN.—The Common Council has let contract for constructing two steel bridges to the HEWETT BRIDGE CO., Minn. S. W. Funk is City Recorder.

GRANTVILLE, KAN.—A bridge will be constructed across Kaw River south of Grantville to connect Jefferson and Shawnee Counties. Cost, $16,000.

CONCORDIA, KAN. — The WESTERN BRIDGE & CONSTRUCTION CO., of Omaha, Neb., has secured the contract for removing and constructing railroad bridge, at $7,977.

HAVRE, MONT.—Bids are asked by W. R. Leet, County Clk., until July 15, for constructing 100-ft. steel or combination bridge, 18 ft. wide, across Big Sandy Creek near Havre.

DILLON, MONT.—Bids are asked by the County Commissioners until July 15 for constructing bridges.

O. E. PEPPARD, of Missoula, Mont., has been awarded contract for construction of steel bridge across Wise River for $1,150, and for steel bridge with 80-ft. pile approach across Beaverhead River, at Barratts, for $2,250.

KIRKWOOD (St. Louis post-office), MO.—The City Council has passed an ordinance authorizing the Missouri Pacific Ry. Sys. to construct steel bridge over its tracks at Clay Ave. E. W. Wiggin, St. Louis, is Engr. Bridges and Buildings.

OLYMPIA, WASH.—The City Clerk has been authorized to readvertise for bids for constructing bridge across the bay from Jefferson to Chestnut Sts. and for grading to Pearl St. Estimated cost, $3,904. The bid of Herman Mallory, $4,590, has been rejected.

WENATCHEE, WASH.—J. W. QUIGG, of this city, has been awarded contracts for constructing bridge across Nason Creek, and bridge across Wenatchee River.

*WOODLAND, CAL.—Bids are asked until 11 a. m., Aug. 1, by the clerks of Yolo and Solano Counties, at Woodland and Fairfield, for constructing a reinforced concrete bridge over Putah Creek. The bridge is to have three 115-ft. spans. C. F. Hadsall is Clerk of Yolo County.

LOS ANGELES, CAL.—The Board of Supervisors has let contract to the MERCEREAU BRIDGE & CONSTRUCTING CO. for constructing 100-ft. pile and trestle bridge across San Jose Creek.

SAN JOSE, CAL.—Bids are asked by the Board of County Supervisors, Henry A. Pfister, Clk., until 11 a. m., July 15, for constructing extension of southwest wing of abutment of bridge across Adobe Creek at the San Francisco and San Jose Road.

SAN JOSE, CAL.—Bids are asked by the Board of County Supervisors, Henry A. Pfister, Clk., until 11 a. m., July 15, for constructing concrete bridge over Calabasas Creek, on the Saratoga and Mountain View Road.

SAN JOSE, CAL.—Bids are asked by the Board of Supervisors, Henry A. Pfister, Clk., until 11 a. m., July 15, for constructing concrete bridge on the Springer Road.

SAN DIEGO, CAL.—The Board of Public Works has recommended replacing wooden bridge on Harrison St. with a concrete structure.

RENO, NEV.—The County Commissioners have let contracts for constructing two steel bridges across Truckee River to the MERVYELWELL CO., of San Francisco, for $5,175 and $5,250.

UINTA, UTAH.—The Commissioners of Weber and Davis Counties have let contract for constructing bridge across Weber River to EUGENE MURPHY.

WAWANESA, MAN.—Bids are asked by J. W. Rathwell until noon, July 20, for constructing steel bridge with concrete foundations.

BUILDINGS.

(* *denotes that this work is advertised in Engineering News.*)

NEW YORK, N. Y.—Bids are asked by J. A. Bensel, Comr. of Docks, until noon, July 19, for building freight sheds on Piers Nos. 54 and 56, North River, between the foot of Little West 12th and West 14th Sts., on the Chelsea section, with lateral extensions on the adjacent bulkhead platforms.

The following bids were received July 8, by C. B. J. Snyder, Supt. Education, for general construction, etc., of new Public School No. 157, on Taaffe pl. and Kent Ave., about 247 ft. south of Park Ave., Boro. of Brooklyn: P. J. Brennan & Son, Fuller Bldg., $433,000; Peter Cleary, 231 Bainbridge St., Brooklyn, $419,000; John Auer & Son, 648 Lexington Ave., Brooklyn, $418,290; Richard E. Henningham, 1 Madison Ave., $417,824; Patrick Gallagher, 1183 Broadway, $424,983; William Werner, 892 Forest Ave., $463,800.

NEW YORK, N. Y.—Bids were received as follows on July 8, by C. B. J. Snyder, Supt. School Bldgs., for installing heating and ventilating apparatus in new Public School No. 43, on westerly side of Brown pl., between 135th and 136th Sts., Boro. of the Bronx: Daniel J. Rice, 5 East 42d St., $42,000; Frank Dobson Co., 319 East 53d st., $42,458; Blake & Williams, 211 West 20th St., $45,282; Baker, Smith & Co., 83 West Houston St., $45,789; E. Rutzler & Co., 127 White St., $45,242.

Bids were received at the same time for installing heating and ventilating apparatus in Public School No. 94, on westerly side of 6th Ave., between 50th and 51st Sts., Boro. of Brooklyn, as follows: Baldwin Engineering Co., 107 West 17th St., $46,999; E. Rutzler & Co., 127 White St., $43,435; Blake & Williams, 211 West 20th St., $43,960; Frank Dobson Co., 319 East 53d St., $43,246.

*ROCHESTER, N. Y.—Herman Probst, 10 West 29th St., New York, has let steam heating and plumbing contracts to CHARLES F. FISCHER for an 8-story hotel for the Rochester Hotel Co., Rochester. Building will cost $1,000,000.

HERMON, N. Y.—A. N. Paddock, New York, is preparing plans for an opera house and musical conservatory, club house and cafe, at Hermon, for Mme. Lillian Nordica to cost $500,000.

NEW YORK, N. Y.—The GEORGE A. FULLER CO., Fuller Bldg., New York, has contract to construct the new building of the Lawyers' Title Insurance & Trust Co., at 160 Broadway, between Liberty St. and Maiden Lane. The building will be 16 stories high, and will have a wing ten stories high and covering a 21-ft. lot, extending to Maiden Lane. On Broadway the structure will rise 230 ft. above the curb, and on Maiden Lane about 136 ft. The two lower floors of the building will be devoted to two high banking rooms, one for the trust company and the other for the real estate and title insurance department of the corporation which owns the structure. Each of these banking rooms will have a mezzanine floor. The basement will be of unusual depth and will also have a mezzanine story, where space for vaults has been provided. The front of the building will be of limestone to the fifth floor, of brick from the fifth to the 14th, and of terra cotta above that. The facade will be a row of columns extending from the street level to the third floor, and between the fourth and fifth floors will be a bronze clock. The structure will contain four elevators in the Broadway section and two in the wing on Maiden Lane. Clinton & Russell, 32 Nassau St., are Archs.

Bids are asked until 2 p. m., July 15, by the Armory Board, for excavation and removal of rock and other material from the site of the proposed armory for the 22d Regiment Engineers, Fort Washington Ave., 168th and 169th Sts., Boro. of Manhattan.

NEW YORK, N. Y.—Bids are asked until 2 p. m., July 18, by John F. Ahearn, Pres. Boro. of Manhattan, for completion of the plumbing and drainage of a public bath building, now being erected on east side of Ave. A, between 23d and 24th Sts., New York, which has been abandoned by the original contractors.

A 20-story building, to cost between $2,000,000 and $3,000,000, will be erected soon on the site of the Temple Court Bldg., on the south side of Beekman St., between Nassau St. and Theatre Alley, by the heirs of the late Eugene Kelly.

Bids are asked by Robert W. Hebberd, Comr. Dept. of Public Charities, until 2.30 p. m., July 22, for tearing down and removal, excavation and masonry, steel and iron, roofing and metal work, carpentry, glazing, painting, hardware, and all other work (except electric, heating and plumbing work, gas and electric fixtures and fitting up) for the erection and entire completion of a day room for male inmates and a day room for female inmates, a reception pavilion for male inmates and a reception room for female inmates, and an operation pavilion in connection with the Home for the Aged and Infirm, Blackwell's Island, New York.

Bids are asked until 10 a. m., July 18, by Theodore A. Bingham, Police Comr., for erecting all the materials necessary in making and completing alterations and general repairs to premises No. 98 John St., Boro. of Manhattan.

NEW YORK, N. Y.—Raymond T. Almirall, 51 Chambers St., is preparing plans for a 4-story library building, 450 × 300 ft., to be erected on Paris Plaza, Boro. of Brooklyn, for the city. Estimated cost, $1,000,000.

The following bids were received July 2 by Francis T. Lantry, Fire Comr., for furnishing all the labor and materials required for erection of an extension to the headquarters building on the southerly side of 68th St., 150 ft. west of Third Ave., Manhattan: Kelley & Kelly, 45 East 42d St., $134,992; Thomas Cockerill & Son, 147 Columbus Ave., $162,500; Richard E. Henningham, 1 Madison Ave., $145,941; F. T. Nesbit Construction Co., 116 Nassau St., $134,569.

Plans have been filed with the Buildings Superintendent for a 12-story apartment house to be built for the Broadway & Cathedral Parkway Realty Co., at the corner of Broadway and 110th St. It will front 90 ft. on Broadway and 165 ft. on the street, and will have accommodations for 53 families. It is to cost $900,000. Rouse & Sloan, 11 West 43d St., are Archs.

ALBANY, N. Y.—Plans for a new group of buildings for St. John's Military Academy have been prepared. They will cost altogether $145,000.

BUFFALO, N. Y.—A Polish hospital is to be built by the Polish citizens of Buffalo on a site that has been acquired in the block bounded by Fillmore Ave. and Stanislaus, Beck and Gibson Sts. The lot measures 205 × 207 ft. on Stanislaus St. in this block, and it is said options on the rest of the block have been taken. The hospital will cost $500,000 with the land. The Polish Sisters of Charity will have charge.

ALBANY, N. Y.—Palmer & Hornbostel, New York, Archs., are preparing plans for a 4-story state educational building for New York state, at Albany. Cost, $3,500,000.

NEW YORK, N. Y.—Bids are asked until 11 a. m., July 22, by C. B. J. Snyder, Supt. School Bldgs., for installing additions and alterations to the heating and ventilating apparatus in Public School No. 35, on Decatur St. and Lewis Ave., and Public School No. 54, on Walworth St., near Myrtle Ave., Boro. of Brooklyn; for alterations, repairs, etc., to Public School No. 100, Truant School and Manual Training High School, Boro. of Brooklyn; for installing heating and ventilating apparatus in new Public School No. 88, on Elm Ave., Fresh Pond Road and Halsey St., Fresh Pond, Boro. of Queens; for heating repairs, etc., of Public Schools Nos. 7, 44, 47 and 72, Boro. of Queens; for moving house, repairs, etc., at Public School No. 52, Broadway, Academy and Vermilyea Aves., Boro. of Manhattan; for the general construction, etc., of additions to and alterations in Public School No. 4, on Rivington, Pitt and Ridge Sts., Boro. of Manhattan; for installing heating and ventilating apparatus in new Public School No. 12, on corner of Madison and Jackson Sts., Boro. of Manhattan.

PRINCETON, N. J.—Plans are being prepared for three laboratories and a dormitory to be erected for Princeton University, to cost $1,500,000. Plans are also being prepared by H. J. Hardenburgh, 1 West 34th St., New York, for a physical laboratory for the University to cost $500,000. Henry C. Bunn is Curator.

PITTSBURG, PA.—D. H. Burnham & Co., Archs., 9 Jackson Boulevard, Chicago, have prepared plans and will receive bids for an office building, at Sixth St. and Smithfield Ave., Pittsburg, for the Oliver Estate, H. L. Wass, Agt., Oliver Bldg., Pittsburg. The building is to be 24 stories high, 120 × 211 ft., built of press brick, stone, steel, terra cotta and asphalt, with copper cornices, plate glass, oak and birch finish, marble, mosaic and tile work, oak flooring, metal, lath, hard plaster, composition roofing, gas and electric fixtures, water closets, washstands, etc. Cost, $2,500,000.

PITTSBURG, PA.—Rutan & Russell, Archs., First National Bank Bldg., have asked bids from the following contractors on the new building of the First National Bank, at Fifth Ave. and Wood St.: William Miller & Sons Co., 23 Federal St., Pittsburg; George A. Fuller Co., Westinghouse Bldg., Pittsburg; William Kerr's Sons, Lewis Block, Pittsburg; H. L. Kreusler, 3301 Penn Ave., Pittsburg; Thomas Riley, Lloyd Bldg., Pittsburg; Henry Shenk Co., Lewis Block, Pittsburg; A. & S. Wilson Co., Third Ave. and Try St., Pittsburg, and Thomson Sterrett Co., and Wells Bros. Co., of New York. Cost, $200,000.

Thomas Hannah, Arch., Diamond Bank Bldg., has let the contract to the A. & S. WILSON CO., Third Ave. and Try St., for a 17-story fireproof steel building at Liberty Ave. and Seventh St., for T. J. Keenan, Farmers' Bank Bldg. Cost, $400,000.

PHILADELPHIA, PA.—The contract has been awarded to DOYLE & CO. for the building which will be erected for the Childs Dining Hall Co., at the corner of Tenth and Market Sts. The new building will be erected at a cost of about $125,000, and will occupy the two lots at 1000 and 1002 Market St., recently acquired on an improvement lease for a long term of years. It will be five stories high, and will have a frontage on Market St. of 44 ft. and a depth on Tenth St. of 100 ft. The entire front will be of white marble, and the first and second floors will be devoted to the dining hall of the

company and a large reading and lounging room. The upper floors will be in the form of lofts for general business and manufacturing purposes. Plans for the building were prepared by Westervelt & Austin, 7 Wall St., New York.

Plans have been prepared by George Lovatt, 420 Walnut St., for a church parochial school and rectory, at 20th and Locust Sts., for St. Patrick's Roman Catholic congregation. Cost, $200,000.

Plans are being prepared by Milligan & Webber for the erection of a flat building, at the corner of 34th and Spring Garden Sts., for Jere L. Cresse. The building will cost $150,000. The house will be four stories high, of brick, with stone trimmings, and a porte cochere entrance. The interior will be finished in mahogany, with sound-proof walls and floors. In all these will be 26 flats. In the basement will be a store.

PHILADELPHIA, PA.—Durang & Son, Twelfth and Chestnut Sts., desires bids for constructing a 1-story church, at Sixth and Tioga Sts., for St. Veronica's R. C. congregation, Rev. John J. Donnelly, Pastor. Stone, roofing slate, open plumbing, marble and tile work, stained glass, steam heat, electric light fixtures, etc., $150,000.

SALISBURY, N. C.—Preliminary work upon a new office building for the Southern Ry. Co. has been started on the yards at Spencer. It is to be a brick structure, 50 × 300 ft. The lower floor will be used as a storehouse, and the second is for the clerical department and the local officials of the road. This building is to have a platform of 600 ft., and will cost about $100,000.

ATLANTA, GA.—Plans are being prepared by the Methodists of the Georgia churches for the erection of a memorial to Wesley in Atlanta. Cost, $200,000.

JACKSONVILLE, FLA.—We are officially advised that contract for erection of freight and office buildings in this city for the Atlantic & East Coast Terminal Ry. Co. has been awarded to W. P. RICHARDSON & CO., of Jacksonville, Fla. J. W. Richardson is Engr. in Charge.

BIRMINGHAM, ALA.—J. L. Chalifoux, Lowell, Mass., represented by Oliver Chalifoux, of Birmingham, it is reported, will erect a steel frame building, possibly ten stories high, to replace structure recently burned at a loss of $150,000.

KNOXVILLE, TENN.—Bids are asked until Aug. 1, by Richards, McCarty & Bulford, The Ruggery, Columbus, Ohio, for constructing a 10-story bank and office building, 32 × 145 ft., at Knoxville, Tenn., for the Knoxville Banking Co. Press brick will be used for construction, with galvanized iron cornice and skylights, fireproofing, plate and prism glass, marble, mosaic and tile work, prepared plaster, reinforced concrete, composition roof, structural iron work, terra cotta, gas and electric fixtures, mantels, plumbing, metal lath, furnace heat, vault doors, safes, ventilators, etc., $160,000. Bids will be received until Aug. 1.

DAYTON, OHIO.—Earl Russ, Arch., Conover Bldg., has plans ready and will receive bids until July 25 for 3-story memorial building, 120 × 170 ft., at corner First and St. Clair Sts., for the trustees of Montgomery County. Press brick marble work, hard plaster, structural iron work, terra cotta or exterior tile, gas and electric fixtures and plumbing. Cost, $250,000.

INDIANAPOLIS, IND.—The Trustees of the Y. M. C. A. are now ready to receive bids for the erection of a $100,000 building on corner Illinois and Ohio Sts. Plans have been approved, and site procured for an 80 × 120 ft. building four stories high.

INDIANAPOLIS, IND.—Bids are asked by J. E. Cleland, Business Director of the City School Board, until noon, July 23, for the installation complete of a heating and ventilating plant and plumbing in school building corner New York and Linwood Sts.

BATTLE CREEK, MICH.—Plans have been prepared by Mills & Pruitt, McCune Bldg., Columbus, Ohio, for a 2-story school building, 240 × 155 ft., to cost $200,000. Bids will be received after June 15.

CHICAGO, ILL.—The congregation of Sinai Temple, Dr. Emil G. Hirsch, Rabbi, has under consideration the erection of a new temple in Hyde Park and the transformation of the present building into a neighborhood center. The present building is at the corner of Indiana Ave. and 21st St. Several sites are under consideration, of which the most favored one is situated at the corner of Grand Boulevard and 46th St. The proposed building is to cost $250,000 to $300,000. Moses E. Greenebaum, 59 Clark St., is Pres.

The Hotel La Salle Company, of Chicago, has been incorporated at Springfield, with a capital stock of $6,000,000. The object of the company is to build a hotel at the corner of Madison and La Salle Sts. Holabird & Roche, Monadnock Block, are Archs.; Edward Gazely, Heyworth Bldg., is the promoter of the hotel.

CHICAGO, ILL.—Frost & Granger, 184 La Salle St., have let the following contracts for a hospital building, at 1423 Michigan Ave., for St. Luke's Hospital, 1417 Indiana Ave. General construction, E. P. STRANDBERG, 159 La Salle St.; steam heat, L. H. PRENTICE CO., 24 Sherman St. It will be six stories high, 125 × 175 ft., built of brick, stone and steel, and will cost $250,000.

*DECATUR, ILL.—Bids are asked until 3 p. m., Aug. 20, by James Knox Taylor, Superv. Arch., for complete construction of U. S. post-office at Decatur.

MILWAUKEE, WIS.—John Griffiths & Son, general contractors, Merchants' Loan & Trust Bldg., 135 Adams St., Chicago, have let the steel work to the MODERN STEEL STRUCTURAL CO., Waukesha, Wis., for constructing a theater and office building to be built at Third St. and Grand Ave., Milwaukee, for Schlitz Brewing Co. It will have 17 stories, and cost $1,500,000.

*ALEXANDRIA, MINN.—Bids are asked by James Knox Taylor, Superv. Arch., Washington, D. C., until 3 p. m., Aug. 19, for constructing, complete, proposed U. S. post-office at Alexandria.

ST. PAUL, MINN.—The Young Women's Christian Association, Dr. J. MacLaren, 589 Endicott Arcade, Chn., proposes to erect a $100,000 association building on Fifth St., near Washington St., St. Paul. It probably will be of fireproof construction, three or four stories in height.

OMAHA, NEB.—John Latenser, Arch., Bee Bldg., has been engaged by the Commissioners of Douglas County to prepare tentative plans for a court house, to cost $1,000,000.

ST. LOUIS, MO.—Plans have been prepared by Cass Gilbert, Arch., 11 East 24th St., New York, N. Y., for the Central Carnegie library on Thirteenth and Olive Sts., to cost about $1,200,000. F. W. Lehmann is Pres. of the Library Board.

The JAMES BLACK MASONRY & CONTRACTING CO., 602 Wright Bldg., has been awarded the contract for erecting an 8-story mercantile building, 50 × 150 ft., at 1320 Washington St., for the Chapman Estate, Chemical Bldg. Estimated cost, $125,000. Mauren, Russel & Garden, 1620 Chemical Bldg., are Archs.

ST. LOUIS, MO.—Mauran, Russell & Garden, Archs., have let general contract to JAMES STEWART & CO., for constructing a 16-story bank and office building for the Liberty Realty Co. Cost, $1,000,000.

Mauran, Russell & Garden, Archs., have let general contract to the MURCH BROS.' CONSTRUCTION CO., Odd Fellows' Bldg., for constructing a 7-story brick, steel and terra cotta mercantile building, 60 × 150 ft., at 15th and Washington Aves., for the Misval Realty Co., Fourth and Pine Sts., at $150,000.

F. C. Bonsack, Columbia Bldg., has let mason contract to the HARTMANN BRICKLAYING & CONTRACTING CO., Odd Fellows' Bldg., and plumbing to HANLEY-CASEY, Chicago, Ill., for a 13-story hotel and theater, 128 × 123 ft., at 7th and Market Sts., for the Southern Real Estate & Financial Co. Cost, $500,000.

COLUMBIA, MO.—Cope & Stewardson, Archs., St. Louis, are preparing plans for an agricultural building for the Missouri State University, Columbia. Cost, $150,000.

OKLAHOMA CITY, OKLA.—Plans are being prepared for the erection of a building to be used as a hotel. Cost, $250,000. C. F. Colcord, of Oklahoma City, is interested.

HOUSTON, TEX.—The Houston Chronicle Building Co. will erect building with ten stories and basement, 72 × 140 ft., 128 ft. high, which will contain between 400 and 500 offices. The building will be of steel-frame construction, requiring 1,600,000 lbs. of steel. Exterior walls will be faced with St. Louis hydraulic pressed brick, trimmed with copper and terra cotta, with granite entrances, marble hallways, electric and gas lights, fans, hot and cold water, modern power plant, and several large dynamos, steam heat, two passenger and one combination passenger and freight elevator. The main elevator will have capacity of 5,000 lbs. and move at the rate of 500 ft. per minute. The basement is to be excavated to a depth of twelve feet entire length and width of building site, will be floored with heavy cement and bounded by walls of steel and concrete and used as press and mailing department. Cost, $400,000. Plans have been prepared by W. L. Strickland and contract has been awarded to A. T. LUCAS.

GALVESTON, TEX.—A site has been secured by Frank P. Sargent, Comr.-Gen. of Immigration; A. B. Frye, Engr.-in-Charge of Public Bldgs., and William Windom, of the Treasury, all of Washington, D. C., on which to erect Government immigration station at Galveston. Contracts will be awarded soon.

ORANGE, TEX.—J. Oliver Hogg, Arch., Kansas City, Mo., has let general contract to JOB HOLLENGER for stone church, at Orange, for the Luther Memorial Church Association. Cost, $250,000.

DALLAS, TEX. — Hubbell & Greene, Archs., North Texas Bldg., have let general contract to OWEN HUGHES and THOMAS BEGGS and steam heating to WALTER DONOVON for society building for the Dallas Scottish Rite Cathedral Association. Cost, $130,000.

FORT WORTH, TEX.—Bids were opened at the office of James Knox Taylor, Superv. Arch., Washington, D. C., for an extension to the U. S. post-office and court-house, Fort Worth, Tex., as follows: John Bardon, Fort Worth, Tex., $141,750; time, Dec. 1908. Knight, Kenyon, Stevenson & Co., Dallas, Tex., $135,700; time, Dec. 1908.

COLORADO SPRINGS, COLO.—Bids were opened as follows at the office of the Supervising Architect, Treasury Dept., Washington, D. C., on July 9, for the construction, complete, of the U. S. post-office and court-house at Colorado Springs: Campbell Building Co., Salt Lake City, Utah, $297,700; time, two years. J. H. Wiese, South Omaha, Neb., $206,958; time, Feb. 1, 1909. John Bardon, Fort Worth, Tex., $236,600; time, Feb. 1, 1909.

PORTLAND, ORE.—Bids for proposed 4-story hospital for the Portland Homeopathic and Dispensary Association will be asked for some time in July, by the architects, Whidden & Lewis, Concord Bldg. It is possible that this action may be deferred until August. The hospital will be erected on the block to which East Second, East Third, Multnomah and Hassalo Sts. are the boundaries. It will cost about $100,000.

MONTREAL, QUE.—A building permit has been granted Mark Workman for erection of a 6-story building, on St. Catherine St., near Phillips' Sq. The new structure is estimated to cost $125,000. The building will have a marble front.

HALIFAX, N. S.—Bids are asked by G. E. Nichols, Secy. Com., 48 Granville St., Halifax, until Aug. 7 for construction of a stone cathedral for the Church of England, at Halifax. Harris & Horton, Keith Bldg., Halifax, are Archs.

CALGARY, ALTA.—Competitive plans will be received by H. R. Dudley Smith, Secy.-Treas., until Aug. 1 for a hospital, maternity hospital, isolation hospital and nurses' home to be constructed of red brick with stone trimmings, at an estimated cost of $140,000.

WATER SUPPLY—IRRIGATION.

*JAMESTOWN, N. Y.—Bids are asked until noon, Aug. 1, by the Board Water Commissioners, for laying about 12,000 ft. 16-in. and 750 ft. 12-in. water mains in Jamestown. Clement B. Jones is Secy.

*IRVINGTON, N. Y.—Bids are asked until 4 p. m., July 23, by the Board of Water Commissioners, for furnishing and laying about 3,000 ft. 12-in. c.-i. water pipe. James G. Orton is Clerk.

*WEST POINT, N. Y.—Bids are asked by the Quartermaster, U. S. Military Academy, until noon, July 29, for constructing two covered slow sand filters, each about one-eighth of an acre in extent.

NEW YORK, N. Y.—The following bids were received July 3 by the Department of Water Supply, Gas and Electricity, for furnishing and delivering double-nozzle hydrants: Kennedy Valve Mfg. Co., 57 Beekman St., New York, $36.86; M. J. Drummond, 182 Broadway, New York, and A. P. Smith Mfg. Co., $36.25.

Bids were also received at the same time for furnishing and delivering c.-i. pipe and special castings, items 1 and 2, as follows: The U. S. Cast-Iron Pipe Co., 71 Broadway, Item 1, $32.96, Item 2, $65.00; M. J. Drummond, 182 Broadway, $32.20, $54.00; John Fox, 253 Broadway, $35.00, $57.46, and Warren Foundry & Machine Co., 170 Broadway, $34.90, $60.00.

NEW YORK, N. Y.—Bids are asked by the Department of Water Supply, Gas and Electricity, John H. O'Brien, Comr., until 2 p. m., July 16, for hauling and laying water mains in West Farms Road and in Jennings, Manida and 178th Sts.

SHELBY, N. C.—Hazen & Whipple, 220 Broadway, New York, are preparing plans for constructing water-works system. Estimated cost, $40,000. R. J. Shields is Clk. Water Bd. J. F. Tiddy is City Clk.

MAXTON, N. C.—Surveys are being made by J. M. Bandy, C. E., for constructing water-works and sewerage systems.

WEST UNION, S. C.—Strother & Phinney will improve oil-mill plant by installing system of water-works.

HOMER, LA.—A water-works system will soon be installed.

DICKSON, TENN.—A water-works plant will probably be installed. Thomas Turner is Mayor.

*CHESTERTON, IND.—Bids are asked until July 20, by the Home Water Co., for constructing a system of water-works.

INDIANAPOLIS, IND.—William Curtis Mabee, Ch. Engr. of the Indianapolis Water-Works Co., has completed plans for constructing 6,000,000-gallon concrete reservoir. Estimated cost, $60,000.

LAPORTE, IND.—LUCE & GIDLEY have been awarded contract to construct ditch in Porter and Lake Counties. The contractors are in the market for ditching machinery.

LAWTON, MICH.—A water-works system will be installed. Cost, $9,000.

WYANDOTTE, MICH.—The Board of Public Works, James G. Pinson, Secy., solicits communications from Sanitary Engineers relative to preparing plans and specifications for constructing filtration plant in connection with present water-works system.

MATTOON, ILL.—Bids are asked by the Mattoon Water-Works & Reservoir Co. until 2 p. m., July 13, for furnishing about 11,300 ft. 12-in. c.-i. pipe, 13,580 ft. 18-in. vitrified sewer pipe and constructing 1,000,000-gallon concrete reservoir. C. L. James, of Mattoon, is Engr.

LADYSMITH, WIS.—The water-works system will be extended.

EMMETSBURG, IOWA.—Bids are asked until Aug. 7 by the Board of County Supervisors for constructing drainage improvements in the following districts: Nos. 12, 15, 16, 17, 18, 19 and 24. Sim. R. Stedman is County Audr.

LAMONT, IOWA.—The DES MOINES IRON & BRIDGE WORKS, Des Moines, Iowa, has secured contract for constructing water-works system, at $4,100.

BELLEPLAINE, MINN.—Plans for constructing water-works system are being prepared by O. Claussen, of St. Paul. Estimated cost, $8,500.

COMFREY, MINN.—Bids are asked by the Village Council, Oscar Erickson, Pres., until 7 p. m., July 16, for constructing water-works.

HENDERSON, MINN.—W. D. LOVELL, of Minneapolis, has been awarded contract for constructing 60,000-gallon concrete reservoir and pipe line, for $9,580. Oscar Claussen, of St. Paul, is Engr.

GARNETT, KAN.—Plans and specifications for constructing filtration plant are being prepared by Burns & McDonnell, 700 Dwight Bldg., Kansas City, Mo.

ALMENA, KAN.—A water-works system will be constructed. Estimated cost, $15,000.

RANDOLPH, NEB.—Bids are asked by E. S. Mailliard, City Clk., until 8 p. m., July 22, for furnishing and laying 5,000 ft. 4-in., 1,520 ft. 6-in. c.-i. water mains and six 4-in. double nozzle fire hydrants.

OTTAWA, KAN.—The contract for laying 6 and 8-in. pipe has been let to WM. PIERSON. McCULLOUGH & BUNYON secured contract for laying 4-in. pipe.

BRYANT, S. DAK.—The city is considering a proposition to construct a filtration plant.

BELLE FOURCHE, S. DAK.—Contract has been awarded to WALTER S. DICKEY, Kansas City, Mo., for furnishing approximately 11,000 lin. ft. of vitrified pipe for use in connection with the Belle Fourche Irrigation Project, S. Dak. The amount of the contract is approximately $[illegible].

WEBB CITY, MO.—The Webb City & Carterville Water-Works Co. will lay five miles of water mains. Estimated cost, $[illegible],000.

SAVANNAH, MO.—The contract for constructing general water-works plant has been let to F. M. CLARK, of this city, for $25,900. The DES MOINES BRIDGE & IRON CO., Des Moines, Iowa, has secured contract for erecting steel tower and tank, at $4,940.

BLYTHEVILLE, ARK.—It is proposed to establish drainage district in Western Arkansas, and about $8,000 has been subscribed for surveys of Mississippi, Craighead, Poinsett and Crittenden Counties, through which the proposed canal will be constructed. The finance and executive committee is composed of A. E. Lang, Blytheville, Ark.; W. C. Dewey, Marked Tree, Ark.; E. L. Westbrook, Jonesboro, Ark., and associates.

PINE BLUFF, ARK.—The Pine Bluff Light & Water Co. will construct water-works plant.

VICTORIA, TEX.—The city will install artesian wells, etc. C. A. Wertheimer is City Secy. Wm. Wheeler is Engr.

HOUSTON, TEX.—Edwin D. Lewis, Boston, Mass., has purchased at $[illegible] the properties of the Raywood Rice Milling & Canal Co., including 21,000 acres of land, 12,500 acres of which are planted in rice; rice mill with daily capacity of 2,[illegible]00 bags, valued at about $70,000; 37 miles of main canals and laterals and pumping station. It is understood that the purchaser will install electrical machinery in pumping plant, extend canals and eventually bring 30,000 acres within the range of water lifts, expending between $250,000 and $300,000.

POTEAU, IND. T.—Bids are being received for constructing pumping station in connection with the water-works. W. M. Murry is Mayor.

MADILL, IND. T.—Water-works will be constructed. Cost, $40,000.

FLORENCE, COLO.—The North Mesa Irrigation Co., recently incorporated with $5,000,000 capital, for the purpose of reclaiming land in Fremont and Pueblo Counties, will soon commence operations. Grape Creek, which enters Arkansas River above Royal Gorge and drains West Mountain Valley, will be flooded to a depth of 30 to 40 ft. The overflow from Grape Creek will be conveyed down the Arkansas River and turned into a canal starting near Canon City and running into northern Pueblo County. At several places along the line of the canal reservoirs will be constructed to store the waters from Grape Creek and numerous other streams. It is the intention of the company to spend about $4,000,000. The company controls Oil Creek and portion of Beaver Creek as its sources of supply. Edward Snell, of Denver, has charge of the engineering work.

NORTH YAKIMA, WASH.—The Secretary of the Interior has let contract to A. G. MOODHE, Spokane, Wash., for constructing the Columnar tunnel and the approaches of main canal, in connection with the Tieton Irrigation Project, Wash., at about $18,217.

LOS ANGELES, CAL.—We are officially informed that the following bids were received June 22 for (A), 13,000 ft. No. 16 gage, 6-in. riveted sheet steel pipe, f. o. b. cars, Los Angeles, and (B), 5,000 ft. No. 14 gage, 8-in. riveted sheet steel pipe, f. o. b. cars, Los Angeles: F. K. Simonds Co., Los Angeles, (a) 24¾ cts. per ft., (B) 36½ cts.; Lacy Mfg. Co., Los Angeles, (A), 23 cts., (B), 33 cts.; J. D. Hooker Co., Los Angeles, (A) 22 cts., (B) 33 cts.

LEHI, UTAH.—A water-works system will probably be installed.

NORTH BATTLEFORD, SASK.—Bids are asked by S. Cookson, Secy.-Treas., until 6 p. m., July 31, for installing water-works, sewerage and electric lighting systems.

YORKTON, SASK.—A water-works system will be constructed. Cost, $45,000.

MEDICINE HAT, ALTA.—The water-works system will be extended. Cost, $25,000.

SEWERAGE.

(denotes that this work is advertised in Engineering News.)*

*WOONSOCKET, R. I.—Bids are asked until 2 p. m., July 18, by the Board of Sewer Commissioners, Woonsocket, for constructing about 1,500 ft. of sanitary sewer. Frank H. Mills is City Engr.

NEW YORK, N. Y.—Bids are asked by the Department of Parks, Moses Herrman, Pres., until 3 p. m., July 18, for furnishing and delivering vitrified stoneware drain pipe for parks, Boro of the Bronx.

NEW YORK, N. Y.—The following bids were received July 10 by the Department of Health for furnishing and delivering vitrified sewer pipe, c-i. manhole covers and Portland cement, to the Tuberculosis Sanatorium, at Otisville, Orange County, N. Y.: Kelley & Kelly, Inc., 45 East 42d St., $11,100; Donegan & Swift, 6 Murray St., $10,786; Earl & Cook Co., 150 Nassau St., $7,777; Stoddard & Hughes, 244 West 29th St., $15,125, all of New York, and Edward Joy, Syracuse, N. Y., $12,075.

*PLAINFIELD, N. J.—Bids are asked by the Common Council until 8 p. m., Aug. 5, for constructing storm sewers. The work includes 2,543 ft. vitrified pipe, concrete or cement block sewer; five manholes and 20 12-in. branches. James T. MacMurray is City Clerk. Andrew J. Gavett is City Surv.

*PLAINFIELD, N. J.—Bids are asked by the Common Council until 8 p. m., Aug. 5, for constructing sanitary sewers. The work includes 20,227 ft. 8-in., 2,148 ft. 10-in.

vitrified pipe sewer; 2,225 ft. 8-in., 995 ft. 10-in. c-i. sewer; 54 manholes; 687 branches on 10-in. vitrified pipe; 60 branches on 10-on 8-in. pipe; 38 crosses and tees on c-i. in. c-i. pipe; 38 flush tanks; 2,785 ft. vitrified pipe pipe; 38 flush tanks; 2,785 ft. vitrified pipe house connections and 150 ft. c-i. house connections. James T. MacMurray is City Clk. Andrew J. Gavett is City Surv.

PHILLIPSBURG, N. J.—The Town Council has let contract to MICHAEL O'HAGAN for constructing sewer on Fillmore St.

COATESVILLE, PA.—Plans are being prepared for constructing pipe sewerage system. Cost, $25,000. Daniel V. McGowan is Boro. Engr.

DUNMORE (Scranton post-office), PA.—The Borough Council has let contract for constructing main and lateral sewers in Section D, Second Sewer District, to SPRUKS BROS. Leslie S. Marsh is Boro. Secy.

SCRANTON, PA.—Bids are asked by the Department of Public Works, C. R. Acker, Dir., until 11 a. m., July 15, for constructing sewers known as Section "A," Nineteenth District. James Langan is City Engr.

*WASHINGTON, D. C.—Bids are asked by the District Commissioners until noon, July 15, for constructing sewers.

WASHINGTON, D. C.—The only bid received by the District Commissioners for constructing sewer on South Capitol St., S. E., was submitted by W. F. Breninger, of this city, as follows: Ordinary excavation, $1.75; red brick masonry, $17; vitrified brick masonry, $24; concrete masonry, B, $9; C, $9; 24-in. pipe, $1.40, and 6-in. underdrain pipe, 30 cts. The work includes about 1,175 lin. ft. of sewers.

ELKINS, W. VA.—The water-works and sewerage systems will probably be extended. Cost, $40,000.

MAXTON, N. C.—See under Water Supply—Irrigation.

CORDELE, GA.—Bids are asked by the City Council until 3 p. m., July 22, for constructing sanitary sewer system. The work consists of approximately nine miles of 8 to 18-in. pipe sewers, 72 manholes, 25 automatic flush tanks, etc. Fred Harder is Chn. J. B. McCrary & Co., Empire Bldg., Atlanta, Ga., are Consult. Engrs.

CORDELE, GA.—Bids are asked until July 22 for constructing sanitary sewers. J. B. McCrary & Co., Empire Bldg., Atlanta, Ga., are Consult. Engrs.

LEBANON, OHIO.—We are officially advised that the lowest bid, $10,181, received July 1, by the Village Council, M. E. Gustin, Clk., for constructing two sanitary sewers, one about 3,400 ft. long, average depth, about 10.9 ft., and one about 6,400 ft. long, average depth, about 10.3 ft., was submitted by Gough & Co., of Muncie, Ind.

YOUNGSTOWN, OHIO.—Bids are asked by the Board of Public Service, W. H. McMillin, Clk., until noon, July 19, for constructing sewer in East Federal St., from Basin to Crab Creek.

MEDINA, OHIO.—Bids are asked by the Village Council until noon, July 16, for constructing sewers and sewage disposal works, etc., in Sewer Dists. Nos. 1 and 2. In Dist. No. 1 the work consists of laying about 1,115 ft. 12-in. and 8,358 ft. 8-in. sewer pipe, six siphons, 39 manholes, and sewage disposal works for Dist. No. 1. In Dist. No. 2 the work consists of laying about 1,325 ft. 15-in., 2,065 ft. 12-in., 24,891 ft. 8-in. and 245 ft. 6-in. sewer pipe, 1½ tons c-i. pipe, 22 siphons, 101 manhole tops and pans, 505 manhole steps and constructing sewage disposal works for Dist. No. 2. O. O. Van Deuren is Village Clk. E. G. Bradbury, of Columbus, Ohio, is Engr.

YOUNGSTOWN, OHIO.—The Board of Public Service has let contract for constructing the Page-North Ave. sewer to J. H. WORMLEY, of this city, for $4,422.

GREENFIELD, IND.—Bids are being received by the City Clerk for constructing sewers in Hendricks and School Sts.

EVANSVILLE, IND.—Bids are being received by the Trustees of the Southern Indiana Hospital for Insane for construction of sewerage disposal plant. C. E. Loughlin is Medical Supt.

MATTOON, ILL.—See under Water Supply—Irrigation.

*WAUKEGAN, ILL.—Bids are asked until 8 p. m., July 19, by the Board of Local Improvements, for constructing a sewer system in Waukegan. Fred W. Churchill is Secy.; M. R. Miller is Supt. of Public Works.

DE PERE, WIS.—We are officially advised that G. P. Hawley, Consult. Engr., De Pere, is preparing plans for sewer extensions here and at Kaukauna, Wis.

MENASHA, WIS.—The City Council has let contract for constructing about 2,700 ft. of sewers on Tayco St. to FRANK LAMB, at 28 cts. per ft.

IDA GROVE, IOWA.—R. C. DE LA HUNT, of Cedar Rapids, has secured contract for constructing sanitary sewer system, for $20,587. Bids were also received as follows: Smith & Son, Indianola, $21,569; Offerman Bros, South Omaha, Neb., $21,603; Independent Construction Co., Davenport, $22,227; Lytle Construction Co., Sioux City, $22,761; McKay & Cathroe, Omaha, $23,066, and A. J. Gary, Denison, $25,140.

CONWAY, IOWA.—W. B. Hazen, C. E., St. Joseph, Mo., has been engaged to make survey and establish grade for constructing sewers.

WICHITA, KAN.—Plans have been completed for constructing West Side sanitary sewer. Estimated cost, $80,000. A. Brown is City Engr.

HIAWATHA, KAN.—Plans and specifications for constructing two lateral sewers are being prepared by W. B. Hazen, C. E., St. Joseph, Mo.

ST. JOSEPH, MO.—The Board of Public Works has let contract to JOHN MARNELL & SON for constructing sewer in district bounded by Rosine, Cherry, Main Sts. and Dewey Ave.

INDEPENDENCE, MO.—We are officially advised that the contract for constructing 9,315 ft. of lateral sewers has been let to T. W. ROBERTS, of this city, for $8,312. W. B. Hazen, St. Joseph, Mo., is Engr.

SAN ANGELO, TEX.—A sewerage system will be constructed.

TACOMA, WASH.—Bids for constructing sewer drain in Dist. 164 have been received as follows: Lister Construction Co., $17,495; Carlson & Swanson, $16,860; M. J. Mickey, $16,890; B. W. Kibler, $17,010; N. A. Jones, $16,485.

ABERDEEN, WASH.—Bids are asked by P. F. Clark, City Clk., until 5 p. m., July 24, for constructing about five miles of 6 to 24-in. vitrified clay pipe sewers, with necessary manholes, flush tanks, etc. H. W. Troutman is City Engr.

SNOHOMISH, WASH.—SNYDER & McADAM, of Everett, Wash., have been awarded contract for constructing trunk sewer on Fifth St., for $18,100.

SANTA MONICA, CAL.—The sewerage system will be extended, pumping plant and septic tank constructed. Estimated cost, $82,500.

SPARKS, NEV.—The City Council has let contract for constructing sewerage system to the AMERICAN LIGHT & WATER CO., of Kansas City, Mo.

NORTH BATTLEFORD, SASK.—Bids are asked by S. Cookson, Secy.-Treas., until 6 p. m., July 31, for constructing sewerage system. Willis Chipman, 103 Bay St., Toronto, Ont., is Engr.

STREETS AND ROADS.

(denotes that this work is advertised in Engineering News.)*

ALBANY, N. Y.—The Board of Contract and Supply, Albany, has awarded the following contracts: To DENNISTON & CO., Rochester, N. Y., for improvement of Morris St., from Ontario to Partridge Sts., for $13,740, and for improvement of Partridge St., from Morris St. to Myrtle Ave., for $3,829; to MICHAEL F. DOLLARD, Albany, for improvement of Judson St., from Livingston Ave. to Manning Boulevard, for $7,737. Isidore Wachsman is Clk. of the Bd.

ALBANY, N. Y.—The following bids were received July 1 by the Board of Contract and Supply, Isidore Wachsman, Clk., for improving and paving Morris St., from Ontario to Partridge St.: Mulderry Bros., Albany, $17,087; Denniston & Co., Rochester, N. Y., $13,704; Edward F. Dillon, 5 North First St., Albany, $15,491, and Michael F. Dollard, 30 South Pearl St., Albany, $18,700. Itemized bids are given this week under Contract Prices. Walter Melius is City Engr.

Bids were received by the Board of Contract and Supply July 1 for improvement and paving of Judson St., from Livingston Ave. to Manning Boulevard, as follows: Denniston & Co., Rochester, $9,150; Mulderry Bros., Albany, $8,582, and Michael F. Dollard, Albany, $7,737.

Bids were also received by the Board of Contract and Supply July 1 for improvement of Partridge St., from Morris St. to Myrtle Ave., as follows: Edward F. Dillon, 5 North First St., Albany, $4,610; Denniston & Co., Rochester, $3,829; Mulderry Bros., Albany, $4,901, and Michael F. Dollard, Albany, $5,110.

BUFFALO, N. Y.—Bids are asked by the Department of Public Works, F. G. Ward, Comr., until 11 a. m., July 16, for paving and repaving portions of various streets.

WARWICK, N. Y.—The Warwick Building Association has let contract to ALBERT DOLSON, of Chester, for constructing road.

ELMIRA, N. Y.—The Board of Public Works has let contract for paving portion of East Church St. with asphalt to COSTELLO & NEAGLE, at about $22,000.

SYRACUSE, N. Y.—Plans have been prepared for constructing four State roads, as follows: Cicero-Brewerton Road, 4.84 miles, $55,200; Syracuse-Cold Spring Road, 4.65 miles, $55,000; Syracuse-Bridgeport Road, 7.59 miles, $88,500, and Baldwinsville-Cold Spring Road, 3.74 miles, $41,600.

ROCHESTER, N. Y.—The Board of Contract and Supply has let contract for paving Clifford St., with Jamestown brick, to WHITMORE, RAUBER & VICINUS, at $43,893. F. A. BROTSCH & SON secured the contract for paving Webster Ave., at $29,995.

*OWEGO, N. Y.—Bids are asked until 8 p. m., July 22, by the Board of Trustees of Owego, Tioga Co., N. Y., for laying 10,000 sq. yds. of brick pavement on concrete base. F. S. Bloodgood is Treas.; William F. Barton is Village Clerk.

*HARRISON, N. Y.—Bids are asked by Robert T. Shore, Town Clerk, Harrison, until 2 p. m., July 24, for regulating, grading and macadamizing Underhill Ave., Lake St., Harrison Ave., Pleasantbridge Ave., West St. and Mamaroneck Ave. Benj. I. Taylor is Superv.

NEW YORK, N. Y.—Bids are asked by Bird S. Coler, Pres. Boro. of Brooklyn, until 11 a. m., July 17, for regulating, grading, curbing, etc., portions of various streets, Boro. of Brooklyn.

NEW YORK, N. Y.—Bids are asked by the Department of Parks, Moses Herrman, Pres., until 3 p. m., July 18, for constructing asphalt tile walks in Bedford, Bushwick, Fulton, Saratoga and Irving Square Parks, Boro. of Brooklyn.

NEW YORK, N. Y.—Bids are asked by the Department of Parks, Moses Herrman, Pres., until 3 p. m., July 25, for paving with asphalt tiles the walks in Kings Park, Boro. of Queens.

Bids are asked by the Department of Docks and Ferries, J. A. Bensel, Comr., until noon, July 19, for furnishing materials and laying asphalt pavement over deck of pier at foot of West 22d St., North River, over the new-made land in the vicinity of West 22d St., North River, at approach to 39th St. Ferry terminal at Whitehall St., Boro. of Manhattan, and at approach to Stapleton Ferry terminal at Staten Island.

NEW YORK, N. Y.—The following bids were received July 5 by the Department of Docks and Ferries, J. A. Bensel, Comr., for flagging and laying granite pavement with crosswalks within the area of the marginal street on Chelsea section, between West 19th and West 22d Sts., North River: M. J. Fitzgeralds, 280 Sixth Ave., Brooklyn, $55,640; John E. Quinn, 71 Marlborough Road, Brooklyn, $61,600; Atlanta Contracting Co., 434 East 91st St., New York, $62,337; John M. Sheehan, 280 Broadway, New York, $54,317, and Matthew Baird Contracting Co., 433 East 92d St., New York, $60,400.

NEW YORK, N. Y.—Bids are asked by the Park Board until 3 p. m., July 25, for furnishing and delivering limestone and limestone screenings in parks in the Boroughs of Brooklyn and Queens. Moses Herrman is Pres.

NEW YORK, N. Y.—The following bids were received on July 2, by the Board of Health, for furnishing all the labor and materials necessary or required to regulate, grade, set curbstones, place a catch basin, lay drain pipe and pave with vitrified brick and with wood block pavements the walks and driveways in and throughout the grounds of the Willard Parker Hospital, foot of East 16th St., Boro. of Manhattan: Franklin Contracting Co., 1 Hudson St., $14,000; A. L. Guidone, 1 Madison Ave., $12,450; Thomas Crimmins Contracting Co., 444 East 61st St., $11,638; Kelley & Kelly (Inc.), 45 East 42d St., $10,200; Columbian Engineering Co., 39 Courtlandt St., $11,373.

EAST PITTSBURG, PA.—Bids are asked by H. C. Kleinhans, Chn. Street Com., until 7.30 p. m., July 15, for grading, paving, etc., portions of various streets. Harrop, Hopkins & Taylor, Lewis Blk., Pittsburg, are Boro. Engrs.

HAGERSTOWN, MD.—Bids are asked until July 30 for paving South Potomac St. with sheet asphalt. Luther Peterman is Clk.

JACKSONVILLE, FLA.—Bids are asked by the Board of Public Works, P. A. Dignan, Chn., until 2.30 p. m., July 22, for grading, paving, curbing, etc., portions of Florida Ave. and Forsyth St. Philip Prioleau is City Engr.

DECATUR, ALA.—The COLUMBUS CONCRETE CO., of Columbus, Miss., has secured contract for constructing about eight miles of cement sidewalks.

VICKSBURG, MISS.—The City Council has let an additional contract to the SOUTHERN PAVING & CONSTRUCTION CO. for paving Washington St., from Harris St. to the city limits, with vitrified brick, at about $20,000.

HUNTINGDON, TENN.—The contract for graveling various streets and the Public Square has been let to the PERRYVILLE GRAVEL & BALLAST CO., for $10,000.

AKRON, OHIO.—The Board of Public Service has let contract to E. McSCHAFFREY & SON for grading, paving and curbing portion of Miller Ave., for $11,258. P. T. McCourt bid $11,409 and John J. O'Neil, $11,766.

RUDOLPH, OHIO.—Bids are asked by the Board of Trustees of Liberty Township, J. C. Friend, Clerk, until 2 p. m., July 13, for constructing two miles of stone road.

YOUNGSTOWN, OHIO.—Bids are asked by the Board of Public Service, W. H. McMillin, Clk., until noon, July 19, for grading Darrow St. from Himrod Ave. to Shehy St.

MURPHYSBORO, OHIO.—The contract for paving 27 blocks in Murphysboro has been let to MR. HILL, of East St. Louis, and H. H. JENKINS, of this city, for $50,000.

CINCINNATI, OHIO.—The County Commissioners have let contract for improving Colerain Pike to N. RUEBEL, for $49,905.

JEFFERSON, OHIO.—Bids are asked by Sam Huston, State Highway Comr., until July 30, for constructing highway.

TIPTON, IND.—Bids are asked by the County Commissioners until 10 a. m., July 26, for construction of gravel road No. 1 in Cicero Township, 10,560 ft. in length. J. F. Barlow is County Audr.

COVINGTON, IND.—Bids are asked by the Commissioners until 1.30 p. m., August 6, for construction of five gravel roads in Jackson Township, aggregating 9.8 miles. William B. Gray is County Audr.

WARSAW, IND.—Bids are being received by the City Council for paving various streets and alleys with brick and concrete.

NEWCASTLE, IND.—Bids are asked by the Town Board until July 16 for grading, graveling and laying cement sidewalks on C and D Aves. G. E. Malim is Clk.

GREENFIELD, IND.—Bids are being received by the City Council for laying cement sidewalks. O. O. Beaver is City Clk.

CHEBOYGAN, MICH.—The Common Council has let contract to I. N. MEAGHER, of Bay City, for paving State St., with brick, at $19,593.

MUSKEGON, MICH.—Bids are asked by P. P. Misner, Recorder, until noon, July 15, for paving portion of Western Ave. with asphalt macadam.

QUINCY, ILL.—Bids are asked by J. C. Carothers, City Clk., until noon, July 15, for paving, etc., portion of Franklin St.

OAK PARK, ILL.—Bids are asked until July 16 by the Board of Local Improvements for construction of 169,000 sq. ft. concrete sidewalk. C. B. Brandstadt is Secy.; R. A. Carpenter is Engr.

DUBUQUE, IOWA.—The McCARTHY IMPROVEMENT CO., of Davenport, Iowa, has been awarded contract for paving various streets.

MUSCATINE, IOWA.—The contract for laying permanent sidewalks during the ensuing year has been let to A. KEMBLE.

ST. PAUL, MINN.—The Board of Public Works, R. L. Gorman, Clk., has awarded contract for macadamizing University Ave., from Prior to Raymond Aves., to the GENERAL CONTRACTING CO., at $20,548.

ST. JOSEPH, MO.—The contract for reconstructing macadam on Ninth St., from Mitchell Ave. to Hickory St., has been let by the Board of Public Works to RACKLIFFE & GIBSON, for $8,668.

ST. LOUIS, MO.—Bids are asked by the Board of Public Improvements, W. B. Dryden, Secy., until noon, July 12, for grading, paving, curbing, etc., various streets and alleys. Estimated cost, $120,000. C. M. Talbert is C. E., Bd. Pub. Impvts.

WAXAHACHIE, TEX.—The City Council has let contract for constructing cement reservoir at the water-works station to COMPTON & WILSON, at $3,225. The reservoir will be 40 × 115 ft. and 15 ft. deep, with capacity of 500,000 gallons.

OKLAHOMA CITY, OKLA.—Bids will soon be asked for constructing about 55,000 sq. yds. of asphalt pavement on 6-in. Portland or hydraulic cement base. W. C. Burke is City Engr.

TACOMA, WASH.—Seven-foot cement sidewalks will be laid on west side of Cliff Ave., from South Second St. to existing walks at Seventh St. Frank L. Davis is City Engr.

SNOHOMISH, WASH.—SNYDER & McADAM, of Everett, Wash., have secured contract for paving First St. with vitrified brick on concrete base, at $31,200.

CHEHALIS, WASH.—The contract for constructing crushed rock roadway on portion of Cascade Ave. has been let to ANDERSON & ROBINSON, of this city, at about $13,000.

TORONTO JUNCTION, ONT.—The Town Council has authorized paving of Dundas St. Cost, $100,000.

MANUFACTURING PLANTS.

(denotes that this work is advertised in Engineering News.)*

WILLIMANTIC, CONN. — The American Thread Co. will construct addition to its local plant. The structure will be five stories high, 75 × 310 ft.

LATROBE, PA.—The Railway Steel Spring Co. has awarded contract to JAMES STEWART & CO., of Pittsburg, for erection of brick and steel addition, 120 ft. in length, with concrete foundations.

PITTSBURG, PA. — The Sterritt-Thomas Foundry Co. has awarded contract to THE PITTSBURG BRIDGE & IRON WORKS, Hartje Building, Pittsburg, for erection of structural steel, concrete and brick foundry building at the plant at 32d and Smallman Sts. The building will be one story in height and 110 × 180 ft. Victor Buetner, Westinghouse Building, Pittsburg, is Designing Engr.

Victor Buetner, Westinghouse Building, is preparing plans, and will receive bids after Sept. 1, for building and equipping $1,000,000 addition to the plant of the Superior Steel Co., James H. Hammond, Gen. Mgr., Carnegie, Pa. Included in the improvements will be open hearth furnaces and mechanical equipment.

JEANNETTE, PA.—J. J. Lowe & Co., rubber specialty manufacturers, of Minerva, O., have secured a site here, and will move the entire works from that city. New buildings will be erected and equipped at cost of about $75,000, and the plant will be built at once, giving, when completed, employment to 100 men. The buildings will be of brick, steel and concrete.

PHILADELPHIA, PA.—CORNELIUS WEST has been awarded contract for rebuilding the factory of the Globe Dye Works. The building will be of fireproof construction and three stories high, 46 × 100 ft. It will be erected at Oxford and Worth Sts., Frankford.

BALTIMORE, MD.—James J. Lacey Co., proprietor Industrial Iron Works, 1401 Block St., will erect two-story addition, 26 × 87 ft., to its plant.

The Baltimore & Ohio R. R. Co., D. D. Carothers, Ch. Engr., Baltimore & Ohio Building, has requested permission from the City Council to build forced-draft station in connection with its electric-power plant.

The following lowest bids have been received for constructing workshop in the city jail yard: Three-story brick, $31,073, and four-story brick, $40,935, M. C. Davis, 5 Hopkins Pl. Three-story concrete block, $33,549, B. F. Bennett, 123 South Howard St., and four-story concrete block, Joseph Schamberger, 2122 East Baltimore St.; re-inforced concrete construction; slag roof; steam-heating system; iron bars to all windows. Work will be done under supervision of E. D. Preston, Inspector of Buildings.

WASHINGTON, D. C.—The New Era Concrete Block & Construction Co., 4424 Eighth St., N. W., recently incorporated, has organized with W. E. Hayes, Pres.; B. Bonnabel, Supt.; V. C. Meyerhoffer, Treas., and F. B. Egan, Secy. The company will erect building 30 × 60 ft. and will manufacture all kinds of concrete products and erect concrete buildings.

CHARLESTON, W. VA.—The Tribune Printing Co. has awarded contract to JAMES McABAN, Pittsburg, Pa., for erection of building to be equipped as printing plant; four stories; metal window frames; reinforced concrete; fireproof; machinery will be operated by natural gas, and for emergency a steam plant will be installed in basement; electric elevator with capacity of 5,000 lbs. The company will expend $15,000 for machinery, including six cylinder presses, twelve jobbing presses and five linotype machines. J. M. Matthews is Secy.

NEW MARTINSVILLE, W. VA.—A factory, 120 × 280 ft., to replace structure recently destroyed by fire, will be erected by the New Martinsville Glass Manufacturing Co. Cost, $50,000.

MOORESVILLE, N. C.—The Lorene Cottonseed Oil Mills is contemplating installation of ice plant and laundry, to be operated in connection with oil mill.

CANTON, N. C.—The Champion Fiber Co. is preparing to build addition to its fiber-paper mills, to be equipped for finishing paper.

QUITMAN, GA.—The Atlantic & Gulf Mills will add 1,368 spindles and accompanying machinery for manufacturing Sea Island cotton and have space for equipment in present building; present equipment, 12,500 spindles. Lockwood, Greene & Co., of Boston, Mass., are Engrs.

EASTMAN, GA.—The Eastman Cotton Mills has increased capital stock from $100,000 to $150,000 and will double present plant. The company will build addition for 300 looms and will buy 5,000 spindles and 150 looms. The power plant, warehouses, etc., are all sufficient for the increased equipment. S. C. Smyly is Gen. Mgr.

TAMPA, FLA.—H. B. Roberts, of J. W. Roberts & Son, will erect cigar factory; three stories, with basement and cellar; 45 × 100 ft.; brick. Cost, $25,000.

CALLAHAN, FLA.—O. H. de Lamorton proposes to establish novelty-manufacturing plant in connection with his industrial college. He plans to erect in all 36 buildings, some of them to be 200 ft. long and three stories high, costing, with equipment, probably $300,000. Products will be bricks, drain tile, roofing tile, shingles, paper fillers, wood articles, furniture, advertising novelties, etc. Steam-power machinery, pottery equipments, electrical apparatus, brick and tile machinery, etc., will be installed.

PALMETTO, FLA.—Tampa Northern R. R. Co., owning 96 acres of land at Palmetto Beach, will build corrugated-iron machine shops, to be equipped with $60,000 worth of machinery, already purchased, which will be operated by either electricity or steam. It is understood that a large standpipe will be located centrally on the property, providing water for the shops.

SHEFFIELD, ALA.—The Southern Cotton Oil Co. will construct fertilizer plant.

GADSDEN, ALA.—The East Tennessee Brewing Co., A. C. Cochran, principal stockholder, Knoxville, Tenn., will install cold-storage and ice plant.

MONTGOMERY, ALA.—The Bigbee Fertilizer Co., recently incorporated, has elected E. R. Tyber, Pres. and Treas.; J. H. Carpenter, Vice-Pres., and H. C. Warren, Secy. The company will establish plant with annual capacity of 40,000 tons to manufacture fertilizer in bulk, and also bag fertilizer, or what is known as ammoniated fertilizer. For the present the company will manufacture its product in the Tennessee Fertilizer Co.'s plant, where offices are now located.

MERIDIAN, MISS.—The Mobile & Ohio R. R. Co., C. F. Blue, at Mobile, Ala., Supt. of Structures, will erect 17-stall roundhouse and machine shop at Meridian. Fred T. Lack, Mobile, Ala., is Arch.

LOUISVILLE, KY.—The Falls City Brewing Co. will erect two-story building, 42 × 90 ft., to be equipped as bottling plant.

PEORIA, ILL.—Stuber & Kuck will construct plant 150 × 65 ft. between South Adams and Washington Sts.

BELLEVILLE, ILL.—Riester & Rubach, Archs., 205 McCortland Bldg., East St. Louis, Ill., are preparing plans for constructing two-story beer depot for the Star Brewing Co., Belleville. Estimated cost, $20,000.

CHICAGO, ILL.—The International Harvester Co., 7 Monroe St., will build addition to its plant at South Deering, Chicago. The company has purchased 30 acres of land bounded by Manistee Ave., 101st St. and 105th St. and the Rock Island road's right-of-way, which will be the site of the addition. It is to be devoted to manufacture of steel to be used in the company's harvesting machines, and is estimated to cost $3,000,000. Preliminary work on the new plant is to be begun soon. The City Council has given permission to vacate the streets running through the property. T. M. Brooms and W. D. Price, office with the owners, have charge of the work.

SPRINGFIELD, MO.—The Hydraulic Stone & Construction Co., recently incorporated, will erect and equip building for production of two-piece hollow wall blocks, using American Hydraulic Stone Co.'s system. Reed & Heckenlively are Archs. W. E. Jewell is Engr. A. C. Spitznagel is Pres.; S. O. Manning, Vice-Pres.; J. F. Duenckel, Secy.-Treas., and W. S. Tucker, Mgr.

SPRINGFIELD, MO.—The St. Louis & San Francisco R. R. Co. has decided to expend $5,000,000 in erecting complete car and locomotive shops instead of $1,500,000, as at first contemplated. It is stated that bids are being received for erection of proposed structures, requiring about 3,000 tons of steel in framework. Arnold Co., Chicago, Ill., are Archs. J. F. Hinckley, St. Louis, Mo., is Ch. Engr.

ST. LOUIS, MO.—A plant, 135 × 309 ft., will be erected at Lafayette and Jefferson Aves. by the Compressed Air & Vacuum Machinery Co., John S. Thurman, Pres. and Gen. Mgr. Cost, $200,000.

EL PASO, TEX.—The Union Iron & Brass Works is planning to install iron foundry to produce iron castings.

HOUSTON, TEX.—The Houston Ice & Brewing Co. will erect two-story concrete building with basement, 130 × 230 ft., to be used as bottling house, warehouse and stables. Cost, $75,000.

The Magnolia Cotton Oil Co., capitalized at $100,000, has awarded contract at $24,500 to C. H. WINN for erection of mill building; three stories; 120 × 176 ft. The contract does not include erection of entire plant, certain portion being reserved which will be completed by owner. Structures will be erected on site of 29 acres recently purchased, and will be equipped with modern oil machinery. P. S. Grogan is Pres.

YAKIMA, WASH.—The Cascade Lumber Co. is planning erection of three-story building, 185 × 150 ft., to be used as warehouse and retail department.

HAMILTON, ONT.—A concrete knitting mill, 300 × 60 ft., four stories, is to be erected for the Eagle Knitting Co. Dyeing machinery purchased from the Utica Novelty & Mill Specialty Co. is to be installed. William McGee is Mgr.

MISCELLANEOUS CONTRACTS.

U. S. RECLAMATION SERVICE.—All news relative to canal projects, etc., will be found under Water Supply—Irrigation.

EXCAVATION.—New York, N. Y.—See under Buildings.

BREAKWATER.—Port Arthur, Ont.—WILLIAM HOGAN has contract for building breakwater here. He has opened an office in this town.

*DREDGING.—Norwalk, Conn.—Bids are asked until noon, Aug. 12, by Maj. Harry Taylor, Corps Engrs., U. S. A., New London, Conn., for dredging in Norwalk Harbor.

DREDGING.—Fredericton, N. B.—The Pejepscot Paper & Pulp Co. has awarded contract to ROWE BROS., Portland, Me., for dredging a channel one mile long in Salmon River, N. B.

RAILS.—Winnipeg, Man.—Bids are asked until noon, July 16, by Magnus Peterson, Secy. of the Civic Board of Control, for the supply of 200 tons of 56-lb. rails, f. o. b. Lac du Bonnet.

*CANAL.—Milner, Idaho.—Bids are asked by Paul S. A. Bickel, Ch. Engr., Twin Falls North Side Land & Water Co., Milner, until 3 p. m., Aug. 1, for constructing 16 miles of canal.

CONCRETE DAM.—Cincinnati, Ohio.—No bids were received on June 29 by Lieut.-Col. Wm. T. Rossell, Corps Engrs., U. S. A., for constructing concrete dam, etc., at head of Marietta Island, Ohio River.

HYDRAULIC DREDGE.—Washington, D. C.—Award for a 10-in. hydraulic dredge, under bids opened June 13, was made by the U. S. Engineer to WETHERILL BROS. MACHINERY CO., Chester, Pa., at $26,400.

JETTIES.—Virginia.—Bids are asked by Maj. Spencer Cosby, Corps Engrs., U. S. A., Washington, until July 29 for constructing riprap jetties in Occoguan, Nomini and Urbana Creeks and Milford Haven, Va.

*CRIB BREAKWATERS.—Racine, Wis.—Bids are asked by Maj. W. V. Judson, Corps. Engrs., U. S. A., Milwaukee, Wis., until 2 p. m., Aug. 2, for building crib breakwaters at Racine and Kenosha harbors, Wis.

RETAINING WALL.—Milwaukee, Wis.—A. MONSTED & CO., Pabst Bldg., secured contract for constructing 1,200 ft. of reinforced-concrete retaining wall at Whitefish Bay resort. John Geist, 428 Grand Ave., is Engr.

TUNNEL ENTRANCES, ETC.—Boston, Mass.—Bids are asked until noon, July 18, by the Boston Transit Commission, for constructing entrances and exit at Winter St. for the Washington St. tunnel. B. Leighton Beal is Secy.

MONUMENT. — Mount Vernon, Ind.—CHARLES G. BLAKE & CO., room 120, 18 La Salle St., Chicago, Ill., have the contract to erect Soldiers' Monument in the courthouse yard at Mount Vernon, Ind., at a cost of $12,798.

*INTAKE AND OUTLET CANAL.—Springer, N. Mex.—Bids are asked until 6 p. m., July 15, by the Farmers' Development Co., Springer, Colfax County, for building intake and outlet canal for the above company. M. N. Mitchell is Vice-Pres. and Gen. Mgr.

COAL POCKET.—Charlestown, Mass.—Bids are asked until noon, July 25, by the Lehigh & Wilkes-Barre Coal Co., 141 Milk St., Boston, for constructing superstructure of reinforced concrete coal pocket in Charlestown. George P. Carver, 25 State St., Boston, is Engr.

HEADSTONES.—Washington, D. C.—The Quartermaster General awarded to the LEE MARBLE CO., of Lee, Mass., on July 6, the contract for the annual supply of marble headstones for erection in the national cemeteries. The contract is for 12,000 stones at $3.20 each.

DAM.—Potsdam, N. Y.—The Raquette River Paper Co., of Potsdam, N. Y., has awarded contract to the AMBURSEN HYDRAULIC CONSTRUCTION CO., of Boston, Mass., for building a concrete-steel dam about 20 ft. high and 300 ft. long across the Raquette River at this point.

*LOCOMOTIVE, CARS.—Fort Moore, Va.—Bids are asked until noon, July 30, by Capt. R. H. Kelton, Q. M., Fort Monroe, for reconstructing and extending railroad track, and for supplying one 10-ton, 6-wheel locomotive, two 12-bench passenger cars and one double-trucked flat car.

RETAINING TERRACE WALL.—Annapolis, Md.—The Noel Construction Co., German and Calvert Sts., Baltimore, Md., submitted the lowest bid, at $27,090, for erection of stone retaining terrace wall about the front of new chapel at the Naval Academy. Company probably will receive contract.

FIRE HOSE.—Washington, D. C.—The following awards were made by the Chief of the Fire Department, District of Columbia, for fire hose: To the GUTTA PERCHA RUBBER CO., 5,000 ft. of rubber hose at $1.10 a ft.; to the FABRIC FIRE HOSE CO., 10,000 ft. of cotton rubber-lined hose at 90 cts. a ft.

*SEA-WALL.—Oyster Bay, N. Y.—Bids are asked until 10 a. m., July 22, by William E. Luyster, Clerk, Board of Supervs., Mineola, Nassau County, N. Y., for constructing a sea-wall along the harbor or east side of the West Shore Road in the town of Oyster Bay. William H. Seaman is Engr., Glen Cove, N. Y.

DREDGING. — Norfolk, Va. — Coastwise Dredging Co., Norfolk, is lowest bidder, at 7.3 cts. per cu. yd., for dredging Norfolk channel to a depth of 30 ft., for which an appropriation of about $1,000,000 is available. Work involves the removal of approximately 7,600,000 yds. of soft mud, sand and clay.

*DREDGING.—Boston, Mass.—Bids are asked by the Board of Harbor and Land Commissioners, Room 131, State House, Boston, until 2 p. m., July 12, for dredging a channel in West Falmouth Harbor and an area in Nantucket Harbor to increase the anchorage area near wharves. Frank W. Hodgdon is Ch. Engr.

CONDUIT.—Washington, D. C.—Bids are asked by Maj. J. T. Crabbs, Q. M., Walter Reed Army Hospital, Takoma Substation, Washington, D. C., until July 18, for constructing concrete conduit on reservation of hospital, approximately 1,000 ft. long, eight feet wide and five feet high, covered with concrete slabs.

DREDGING.—Mobile, Ala.—On June 28 contract was awarded to GEORGE G. BARKER, of Wilmington, Del., at 7½ and 10 cts. a cu. yd., by Maj. H. Jervey, Corps Engrs., U. S. A., for dredging in Mobile Harbor. It is estimated that there is about 4,000,000 cu. yds. earth to be dredged, and the estimated cost is $320,000.

GAS COMPRESSORS.—Washington, D. C.—Award has been made by the Army Signal Office, War Department, Washington, D. C., to the INGERSOLL-RAND CO., 11 Broadway, New York, for one hydrogen gas compressor. An award of one oxygen gas compressor to the same firm is pending. Bids were received June 28.

STEAMBOAT REPAIRS.—New York, N. Y.—Bids are asked until 9.45 a. m., July 17, by the Board of Health, for furnishing all necessary labor and materials required to make certain alterations and repairs to the steamboat "Franklin Edson" for the Department of Health of the City of New York. Dr. Thomas Darlington is Pres.

EXCAVATION.—Portland, Ore.—Following is a list of bids per cubic yard received June 29 at Portland, for rock excavation in Sasanoa River; estimated quantity, 2,800 cu. yds.: Simon J. Donovan, Winthrop, Mass., $16.90; Frank W. Carlton, Bath, Me., $9.50; John H. Gerrish, Boston, Mass., $14; Johnston & Virden, Lewes, Del., $16.35.

STEEL.—Belle Fourche, S. Dak.—The Secretary of the Interior has awarded contract to the GENERAL FIRE-PROOFING CO., of Youngstown, Ohio, to furnish and deliver about 350,000 lbs. of steel for the reinforcement of concrete and for structural purpose in connection with the Belle Fourche irrigation project, S. Dak. The contracts amount to $14,200.

LEVEE.—Piggott, Ark.—Bids are asked until July 16 by the Board of Directors of the St. Francis District of Clay and Greene Counties, at Piggott, for enlarging a total of twelve miles of levee; building 7.2 miles of levee and dredging 30½ miles of main drainage ditch, including clearings, tools and labor necessary to complete same. George W Leitz is Secy.

DREDGING.—Duluth, Minn.—Bids were received June 28, by Maj. Graham D. Fitch, Corps Engrs., U. S. A., for dredging in Duluth-Superior Harbor, as advertised in Engineering News. The Duluth-Superior Dredging Co., Duluth, submitted the lowest bid, ranging from 10 cts. to 25 cts. a square yd., according to location. There is about 1,000,000 cu. yds, dredging, and the estimated cost is $117,250.

BRICKS, GRAVEL.—Washington, D. C.—The contract for repressed vitrified invert sewer bricks for the fiscal year beginning July 1, 1907, has been let by the Commissioners of the District of Columbia to JAMES W. PORTER, of Pittsburg, Pa., at $15.85 per thousand. The contract for sand and gravel for the fiscal year beginning July 1, 1907, has been let by the Commissioners of the District of Columbia to the POTOMAC DREDGING CO. of Washington, D. C.

DREDGING. — Baltimore, Md. — Maryland Dredging Co., Fidelity Bldg., was the lowest bidder for dredging work in connection with widening and deepening the ship channel leading to Baltimore. Work involves following approximate quantities: Section A, 8,516,470 cu. yds. of soft mud; Section B, 508,348 cu. yds. of sand and clay, and Section C, 1,621,125 cu. yds. of hard, compact sand. Work will be done under supervision of Col. R. L. Hoxie, U. S. Corps of Engrs., U. S. A., 812 St. Paul St.

DREDGING.—Cleveland, Ohio—The following bids were received on July 5, by Lieut.-Col. C. McD. Townsend, Corps Engrs., U. S. A., for dredging in Cleveland Harbor: Daly & Hannon Dredging Co., Ogdensburg, 17½ cts.; G. W. Breyman & Bros., Toledo, Ohio, 22 cts.; GREAT LAKES DREDGE & DOCK CO., Chamber of Commerce Bldg., Chicago, 15½ cts. (awarded contract); Lake Erie Dredging Co., Buffalo, N. Y., 22 cts. Estimated quantity of earth, 800,000 cu. yds.; estimated cost, $125,000.

CANAL.—Wyoming.—Surveys are now in progress and preparations are being made to let contract for constructing irrigation canal for the Wyoming Central Irrigation Co., and bids will be called for late in the fall. The equipment needed includes two 70-ton steam shovels, four 45-ton traction shovels, 500 teams and 100 wheel scrapers. The work consists of about 5,000,000 cu. ft. excavation. Estimated cost, $3,000,000. H. G. Raschbacher is Ch. Engr., Riverton, Wyo.; Clarence T. Johnston, Cheyenne, Wyo., is Des. Engr.

TUNNEL.—Buxton, Ore.—The Pacific Railway & Navigation Co. has let contract for construction of a tunnel on the road to A. J. & GEORGE McCABE, Chamber of Commerce Bldg., Portland railway contractors. This is the first long tunnel to be driven on the Lytle road. A number of others will be built as soon as the work progresses sufficiently. The contract just let calls for a tunnel 1,400 feet long at a point five miles almost directly west of Buxton, the place to which the road has already been completed. The work is heavy rock drilling. An electric light plant will be installed and the work prosecuted day and night. It is expected to have the tunnel completed in six or eight months. E. E. Lytle is Pres.

SHEDS.—New York, N. Y.—Bi[illegible] are asked until noon, July 19, by J. A. [illegible], Comr. Docks, for building freight sh[illegible] on piers Nos. 54 and 56, North River, [illegible] between the foot of Little West 12th and W[illegible] 14th Sts., on the Chelsea section, with la[illegible] extensions on the adjacent bulkhead[illegible] platforms; and for laying asphalt paveme[illegible] over the deck of the pier at the foot of W[illegible] 22d St., North River, over the new-made [illegible] in the vicinity of West 22d St., North R[illegible] at the approach to the 39th St. Ferry [illegible] at the Whitehall St., Boro. of Manhat[illegible] minal at and at the approach to the Stapleton Fe[illegible] terminal at Staten Island.

DREDGING.—Newport, R. I.—[illegible] following bids were received by Col. J. [illegible] Willard, Corps Engrs., U. S. A., Newpo[illegible] R. I., on July 6, for dredging in harbors [illegible] New Bedford and Fairhaven, Mass.: Colu[illegible] Dredging Co., New York, N. Y., 13.7 [illegible] per cu. yd.; Morris & Cummings Dredgi[illegible] New York, 15.9 cts.; International D[illegible] Co., New York, 17.5 cts.; Charles M. [illegible] Fall River, Mass., 14.5 cts.; J. S. Pack[illegible] Dredging Co., Providence, R. I., 14.9 cts; Eastern Dredging Co., Boston, 15.6 cts.; Maritime Dredging Co., New York, 13.4 cts; COAST-WISE DREDGING CO., Norfolk, Va., 12.7 cts. (awarded contract). Estimated cost, $270,000.

LEVEE CONSTRUCTION.—Memphis, Tenn.—On June 26, the St. Francis Levee Board opened bids for construction of about 3,300,000 yds. of levee work at various points in Arkansas along the Mississippi River and awarded following contracts: R. [illegible] LEONARD, 391,300 yds., at 32 cts. per yd., between Bradley and Mound City; also 90,000 yds. at Bledsoe, at 24 cts. per yd., and 79,500 yds. below White Hall, at 25 cts. per yd.; ROACH & STANSELL, 337,700 yds. between Mound City and Choctaw Railroad, at 29 cts. per yd.; R. L. CHESHIRE, 250,000 yds. at Seyppel, at 18 cts. per yd, all of Memphis, Tenn. A bond issue of $500,000 was recently authorized for levee improvements. W. B. Miller, Marked Tree, Ark., is Pres.; B. G. Covington, Ch. Engr., 168 Randolph Bldg., Memphis, Tenn.

CHANNEL EXCAVATION.—Buffalo, N. Y.—Bids were opened by the Engineer of Rivers and Harbors on July 1 for excavating a channel 23 ft. deep and 200 ft. wide through Black Rock Harbor, Buffalo, for the Black Rock Ship Canal (which is being constructed by the Federal Government), beginning at the terminus of the excavating work now being done by the Empire Engineering Corporation of New York, who received the first contract for excavating work. The following bids were received: Buffalo Dredging Co., of Buffalo, $820,640; Daly & Hannon Dredging Co., of Ogdensburg, $887,285; Lake Erie Dredging Co., of Buffalo, $918,10; Great Lakes Dredging Co., of Chicago, $981,200. The bids have been forwarded to Washington, and it is probable that the contract will be awarded within the next two weeks to the lowest bidder, the Buffalo Dredging Co.

CAUSEWAY.—Galveston, Tex.—Plans and estimates have been received by the Causeway Committee, George E. Mann, Chn., for the proposed causeway to connect Galveston Island with the mainland as prepared by the chief engineers of the Gulf, Colorado & Santa Fe and the Southern Pacific Railway companies. About $1,400,000 is the estimated cost, including riprap protection for sides, based on the following principal dimensions: Waterway—Length of clear draw opening, 100 ft.; length of clear waterway, including draw opening, four 30-foot arches for small craft, 1,700 ft. Width of draw span—Highway and interurban, 18 ft.; two standard-gage tracks, 27 ft.; total, 45 ft. Width of reinforced-concrete arch bridge—Highway, 18 ft.; interurban road, 15 ft.; two standard-gage railroad tracks, 29 ft.; total, 62 ft. Width of causeway—Highway, 24 ft.; interurban, 15 ft.; two standard-gage railroad tracks, 33 ft.; total, 72 ft. Height of grade above mean low tide, 17 ft.; height of grade above mean low tide at shore line, 14 ft.; grade of highway approaches, 3%; grade of railroad approaches, 0.3%; mean low tide to top of arch bridge foundation, 16 ft.; mean low tide to top of draw span, 24 ft. C. F. W. Felt is Ch. Engr., G., C. & S. F. Ry. Co., Galveston; W. Hood is Ch. Engr. S. P. C., San Francisco.

LUMBER.—Fredericksburg, Va.—Bids have been opened as follows at the Office of Chief Engineer, Washington, D. C., for lumber and piles for the improving of Rappahannock River, Va.: (1) Lumber, 632,107 ft., delivered at Fredericksburg; (2) piles, 55,355 lin. ft.; a, delivered as Chief Engineer may direct; b, delivered at Fredericksburg, Va. Frank Libbey & Co., Washington, D. C., (1) $16,372; William D. Gill & Sons, Baltimore, Md., (1) $15,297; George L. Johnson, Norfolk, Va., (2) a, $4,982, b, $4,428; W. J. Delano, Warsaw, Va., (2) a, $5,535, b, $4,428; Culpepper & Co., Baltimore, Md., (2) a, $5,397, b, $5,397; J. H. Burton, (1) $15,739; Charles R. Johnson, (1) $21,327; Evan Owen, Weems, Va., (1) $15,271, (2) a, $4,290; G. Elias & Bro., (1) $18,015, (2) b, $8,303; Warner A. Eubank, Killmannock, Va.; (2) a, $3,736; E. W. Mills, Fredericksburg, Va., (2) a, $7,749, b, $5,830; Crockett Lumber & Pile Co., Norfolk, Va., (1) $17,699, (2) a, $6,366, b, $6,089; Carter & Clark, Washington, D. C., (1) $14,339, (2) a, $5,535; G. B. Wallace, (2) a, $5,535; Thomas R. Riley, Washington, D. C., (1) $15,600, (2) a, $16,606, b, $13,839; Murphy & Hall, Washington, D. C., (2) a, $4,569; Church & Stevenson, (1) $15,012; J. E. Duke, Norfolk, Va., (1) $14,222, (2) b, $5,643.

*BARGE CANAL.—Albany, N. Y.—Bids are asked until noon, July 31, by F. C. Stevens, Supt. Public Works, Albany, N. Y., for three additional contracts for barge canal construction work, as follows:

Contract No. 12—Excavation of the Erie Canal, protection of its sides, construction of Lock No. 23 and appertaining structures, bridges, abutments and bridge approaches and other incidental details, between deep water at west end of Oneida Lake, Station 2720, and Mosquito Point bridge over the Seneca River at the east end of Contract No. 5, Station 5074. The work is located in Os-

wego and Cayuga Counties and the contract is 43.73 miles long. The engineer's estimate is $3,087,000. Contract 12 is the largest contract for Barge Canal work thus far advertised.

Contract No. 14—Dredging a channel in the Mohawk River between west end of Contract 11, Station 305, and a point near the upper Mohawk Aqueduct at Rexford Flats, Station 104+; for constructing Dam No. 2 below Crescent Aqueduct, Station 305; Dam No. 3 and Lock No. 7 above Vischer's Ferry, Station 830; Dam No. 9 and Lock No. 13 at Yosts, Station 2954; Dam No. 10 and Lock No. 14, at Canajoharie, Station 3370; Dam No. 11 and Lock No. 15, at Fort Plain, Station 3554; retaining dam at Mindenville, Station 3865; highway changes; culverts, and incidental work appertaining thereto. The work is located in Saratoga, Schenectady, Montgomery and Albany Counties, and the contract is 17 miles long. The engineer's estimate is $2,875,570.

Contract No. 35—Excavating the Oswego Canal and protecting its sides; constructing Locks Nos. 7 and 8; bulkheads; culverts; spillways and incidental details between .56 of a mile above the Utica St. bridge, Station 1164 + 00, and the harbor line north of Bridge St. bridge, Station 1208 + 85, at Oswego, N. Y. The work is located in Oswego County, and the contract is .85 of a mile long. The engineer's estimate is $752,760. Frederick Skene is State Engr. and Surv.

CONTRACT PRICES.

[Where (*) precedes items under Contract Prices the work was advertised in Engineering News.]

HIGH LEVEL SEWER.—Brookline, Mass.—The following bids were submitted to the Metropolitan Water and Sewerage Board on June 28 for extension of High Level Sewer, South Metropolitan System, Brookline (Contract 57), by (A) George M. Bryne Co., 7 Water St., Boston; (B) Falvey & Kelly, 15 Intervale Park, Dorchester; (C) Charles G. Craib & Co., Winthrop; (C) Bruno, Salomone & Petitti, 23 Court St., Boston; (E) George J. Regan, 92 Stoughton St., Dorchester; (F) James Driscoll & Son, Brookline; (G) Jones & Meehan, 10 Tremont St., Boston; (H) Coughlan & Sheils, 104 Hanover St., Boston; (I) T. J. O'Connell, 158 Adams St., Dorchester:

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
1,350 lin. ft. earth excavation and refilling in trench 6′ 6″ × 7′ 0″ sewer.	$14.50	$14.50	$13.50	$13.75	$13.25	$14.00	$13.00	$9.90	$8.75
50 cu. yds. brick masonry, Portland in manholes	15.00	15.00	15.00	16.00	18.00	16.00	15.00	14.00	16.00
2,000 cu. yds. concrete masonry, Portland in trench, 6′ 6″ × 7′ 0″ sewer.	9.00	8.25	9.00	8.35	8.50	8.00	8.00	7.50	8.00
300 cu. yds. rock excavation in trench	8.00	7.00	5.00	4.50	5.00	5.00	6.00	4.50	6.00
Totals	$40,725	$38,925	$38,475	$37,412	$37,287	$37,200	$36,100	$30,415	$30,412

REGULATING, GRADING, ETC.—New York, N. Y.—The following bids were received on June 26 by Joseph Bermel, Pres. Boro. of Queens, for regulating and grading the Boulevard, from Webster Ave. to Broadway, First Ward; bids were submitted by (A) Atlanta Contracting Co., 434 East 91st St.; (B) D. W. Moran, 592 Burnside Ave.; (C) James A. Boyce & Co., Astoria; (D) Pease Bros., 20 Main St., Flushing; (E) Astoria Contracting Co., Astoria; (F) Thomas F. Tuohy, 97 Main St., Brooklyn; (G) Henry Mullef, 328 Fulton St., Jamaica:

	(A)	(B)	(C)	(D)	(E)	(F)	(G)
555 cu. yds. rock excavation	$3.00	$2.00	$6.40	$7.00	$2.40	$4.00	$4.00
4,866 cu. yds. earth excavation	.63	.45	.30	.75	.40	.45	.40
105,000 cu. yds. earth filling (furnished)	.61	.69	.58	.49	.63	.58	.60
300 lin. ft., 24″ diameter, pipe, in place	6.00	8.00	5.80	10.50	8.00	8.50	10.00
Totals	$70,581	$78,150	$67,152	$62,334	$71,828	$70,120	$70.166

PAVING.—Albany, N. Y.—The following bids were received by the Board of Contract and Supply, Albany, on July 1 for improving and paving Morris St., from Ontario to Partridge St.: (A) Mulderry Bros., Albany, $17,087; (B) Denniston & Co., Rochester, $13,740; (C) Edward F. Dillon, 5 North First St., Albany, $15,491; (D) Michael F. Dollard, 30 South Pearl St., Albany, $18,699. The bids are:

	(A)	(B)	(C)	(D)
2,070 sq. yds. brick paving	$3.07	$2.80	$2.70	$3.15
20 sq. yds. driveways	3.07	2.80	2.90	3.45
15 sq. yds. relaying pavement	1.50	1.00	1.00	1.20
15 sq. yds. relaying pavement	1.19	1.00	1.25	1.30
1,320 lin. ft. straight curb	1.45	1.15	1.40	1.45
6 lin. ft. circular curb	.50	.60	.50	.50
30 lin. ft. relaying curb	.29	.23	.25	.30
4,775 sq. ft. flag walk	.23	.15	.20	.20
17,135 sq. ft. brick walk	.10	.07	.09	.10
550 sq. ft. relaying walk	1.75	1.45	1.65	1.85
1,085 lin. ft. 12″ pipe	.80	.65	.75	.90
70 lin. ft. 6″ pipe	4.90	3.50	4.50	5.00
40 Y branches	.70	.50	.50	.75
20 6″ bends	1.25	1.00	1.50	1.00
10 6″ reducers	29.00	25.00	30.00	35.00
17 water services	65.00	35.00	65.00	50.00
5 manholes	98.00	90.00	98.00	100.00
1 receiving basin	40.00	35.00	40.00	45.00
1 gutter basin	20.00	10.00	22.00	25.00
6 grubbing trees	80.00	50.00	65.00	90.00
Days to complete, $5 per day				
Totals	$17,087	$13,740	$15,491	$18,699

MEXICO.

BREWERY.—Coahuila.—The Government of the State of Coahuila has recently granted to Frederico Wulff, of Torreon, a concession exempting from taxation for 15 years the sum of $250,000, which will be spent on the establishment of a brewery in Saltillo.

RAILWAY.—Zacatecas.—Robert S. Towne, of New York, and associates are back of a projected railroad that is to be built from the City of Zacatecas to Durango, a distance of 250 miles. Mr. Towne is at the head of the Mexican Northern and is the principal owner of the large smelter at San Luis Potosi. A numer of rich mines are in this section.

RAILWAY.—Durango.—G. W. West, Div. Engr., writes us that a locating party of the Mexican International Ry. in charge of G. W. West has reached Guadalajara, having completed 370 kilometers of preliminary and location from Durango. The survey has been in progress two years and is the longest 1% maximum curve located in the republic. Some very heavy work was covered in the States of Zacatecas, Aguarcalientes and Jalisco. Construction probably will follow soon.

RAILWAY.—Zacatecas.—A concession has been obtained by James P. Taylor for John Cooper, for construction and operation of a railroad in the State of Zacatecas, from the Camacho station; on the Central Ry., to the towns of Tecolote and Cedros, and terminating at Bonanza, with a branch from Cedros to Mazapil and Salaverna. The surveys must begin within six months and a minimum of 30 kilometers of road must be finished within two years, and 35 kilometers, at least, each successive year thereafter, so as to complete the whole road within six years. The gage may be broad or narrow, as the concessionaire may decide.

ENGINE AND MOTOR PLANT.—City of Mexico.—The Government has made an agreement with Thomas H. Wheless, for establishment within the territory of the republic of a factory or factories for the manufacture of railway engines and motors of all descriptions, whether driven by steam, petroleum or electricity. It is stipulated that a sum of not less than $100,000 shall be invested in the concern. The capital invested in the business is to be exempt for a period of ten years from the date of the contract from all direct Federal taxes, with the exception of the Stamp Tax. All the necessary material and machinery may be imported free of duty.

FOREIGN CONTRACTS.

(To insure prompt attention, letters upon consular business should be addressed to the American Consul at ———, ———. Such letters are opened and attended to by the person that may be in charge of the office. If addressed to the consul, personally, letters are forwarded to him, unopened, should he be absent, and a delay thus intervenes. If, in the meantime, he should have gone out of office the matter may wholly escape attention.)

RAILWAY.—France.—Department de la Charente will construct more than 200 miles of narrow-gage railway.

RAILWAY CARS.—Sicily.—The Italian Government Railways are in the market for railway cars of one meter gage.

RAILWAY.—Italy.—Bids are asked by the Department of Public Works, Rome, until Aug. 16, for constructing the Erythrean railways.

ELECTRIC RAILWAY.—Spain.—Bids are asked by the Department of Public Works until Aug. 12 for constructing electric railway in Valencia.

RESERVOIRS.—Roumania.—Bids are asked for construction of five petroleum reservoirs and six wheel silos of 38,000 tons capacity, each, at Constantza.

RAILWAY.—Chile.—The Government has authorized the expenditure of about $350,000 on surveys for construction of a railway between La Ligua and the port of Arica.

RAILWAY BRIDGES.—Chile.—The Chilean Legation, 60 Rue de Prony, Paris, will furnish particulars regarding various railway bridges to be built for the Government of Chile.

ELECTRIC RAILWAY.—Spain.—Bids are asked until July 30, by the Public Works Dept., for constructing an electric railway at San Sebastian. Deposit, about $7,200.

WATER-WORKS.—France.—Bids are asked until Aug. 2 by the Municipality for constructing water-works at Bressaux, Bellaire and Jupille. Estimated cost, $61,965.

ELECTRICAL SUPPLIES. — Australia. — Bids are asked until Aug. 6 by the Deputy Postmaster General, Perth, W. A., for furnishing two sets of desiccating apparatus with motor-driven air pumps for telephone cable work, and two ringing dynamometers.

PUMPING MACHINERY.—India.—E. Ault, Engr., Municipality of Rangoon, in his report regarding the water supply of Rangoon recommends lowering the present 42-in. pipe line, installing two sets of pumping engines capable of raising 10,000 gallons per minute, keeping one in reserve, and later on putting down a third engine of the same size, which would provide for the raising of 20,000 gallons with one engine in reserve. He also advises a dam and pipe line to connect the northern catchment area of Hlawga.

HYDRAULIC CRANES. — England. — Bids are asked until Aug. 7, at the Harbor Offices, Swansea, for two hydraulic fixed cranes of 50 and 70 tons capacity; lifting radius, 60 ft.; jib range, 45 to 60 ft.; lift range, 60 ft. above and 30 ft. below level of coping; also hydraulic lifting, slewing and derricking gear.

ELECTRIC RAILWAY.—Italy.—Genoa and Milan are to be connected by an electric road 85 miles long, which is to cost $7,000,000. The high cost is owing to the nature of the country through which the line will pass. It will require 19 tunnels, one of which will be twelve miles long. There will be 372 bridges, and the road will be six years in course of construction. The cost of the line construction alone will be $500,000 a mile. The road will be double-tracked and there will be no grade crossings. Trains will consist of three cars, each accommodating 50 passengers. It is proposed to run 20 trains a day, and it is estimated that the daily traffic will be 6,000 passengers. The power will be derived from a 24,000 horse-power hydraulic generating plant.

IRRIGATION.—Spain.—A report has been presented to the Government recommending various improvements to fertilize about 230,000 acres of land along the Guadalquiver River, the basin of which is spread over 300 miles. The proposed works include: Twelve natural reservoirs, capable of storing 740,000,000 cubic meters of water, the largest of which is to have a length of ten miles, with a superficial area of 1,550 acres; a dam to be constructed at Peñaflor, 45 miles above Seville; groups of canals for distributing the water collected. It is estimated that the execution of the works will occupy a period of 30 years, and cost will be about $9,200,000, to which must be added $15,200,000 to be invested in preparatory works on the land, trenches, agricultural buildings, etc. The state will defray half the estimated cost of the works and advance 90% of the money required. A syndicate of the members of the Chamber of Agriculture has been formed to take up the execution of the works.

INDUSTRIAL NOTES.

THE FREEBORN ENGINEERING & CONSTRUCTION CO., formerly located at 707-710 Heist Bldg., has removed its offices to 605-615 Scarritt Bldg., Kansas City, Mo.

THE GERMAN-AMERICAN PORTLAND CEMENT WORKS, La Salle, Ill., desires to state that any and all reports to the effect that these works had been merged with other cement manufacturers were absolutely false and without foundation.

THE LACLEDE-CHRISTY CLAY PRODUCTS CO., of St. Louis, Mo., has been organized as a consolidation of the Laclede Fire Brick Mfg. Co. and the Christy Fire Clay Co. It will operate both plants and will manufacture sewer pipe and fittings, fireproofing, vitrified clay products, lining for furnaces and kilns (including bauxite of basic brick for the fire zone), and fire brick for various purposes.

VON SCHRENK, FULKS & KAMMERER, Consulting Timber Engineers, Tower Grove and Flad Aves., St. Louis, Mo., is a newly organized firm, whose members have been connected with the timber investigations of the U. S. Department of Agriculture. It will undertake to investigate and report upon the use and preservation of timber, wood pulp and other processes of utilization, and timber work in relation to railway and building construction, etc. Also the planting and management of timber lands.

THE PITTSBURG STEEL CO., Pittsburg, Pa., has arranged for an issue of $4,000,000 of first mortgage 6 per cent. bonds, to provide funds for the erection at Monessen, Pa., of eight 60-ton open hearth furnaces, a blooming mill and three billet mills. The additions arranged for are merely preliminary to the erection of blast furnaces at Monessen on a large tract of land recently purchased from the Southside Land Co. The open hearth furnaces will have a capacity of 2,000 tons a day. The billet mills will be the largest and most modern of any in the world.

READERS' WANTS

If you are in the market for material, equipment or supplies, and fail to find it in our advertising pages, send us full particulars, and we will gladly put you in touch with the right parties.

Also ask for our BUYERS' GUIDE

BUILDING MATERIAL CATALOGS. New York City.—Chas. Iffer & Co., 1161 Broadway, New York City, general contractors and builders, would like to receive catalogs from plumbing, steam fitting, ventilating and general building material firms.

PAVING MATERIAL, Butte, Mont.—Alexander Leggatt, City Engr., Butte, Mont., writes us that he desires to receive samples of paving materials and data thereon from manufacturers.

PIPE MOLDS, St. Boniface, Man.—J. Oliver Delisle, Town Engr., St. Boniface, Man., writes that he desires to communicate with American firms manufacturing metal molds for sewer pipes from 12 inches to 3 feet in diameter.

ELECTRIC RAILWAY EQUIPMENT, Tulsa, I. T.—We are advised by J. Robert Burnham, C. E., Tulsa, Ind., that he desires prices on trolley wire, rails, ties, cars, motors, generators, engines, etc., to equip a line of about 25 miles.

TRADE PUBLICATIONS.

DUMP WAGONS.—Studebaker Bros. Mfg. Co., South Bend, Ind. Paper, 8½ × 7¼ ins.; pp. 40; illustrated.

Municipal vehicles, such as ash carts, garbage wagons, sprinklers and street sweepers are the principal subjects of this pamphlet.

FIRE BRICK.—The Garden City Sand Co., Chicago, Ill. Paper, 4¾ × 7 ins.; pp. 28; illustrated.

This contains in addition to detailed lists of special and uniform grades and shapes of fire brick, many suggestions as to fire brick requirements and specifications.

CONCRETE FORMS.—Universal Form Co., New York. Paper; 6 × 9 ins.; pp. 14; illustrated.

This company makes a patent steel clad self-alining form which is flexible and adjustable and can be removed and used again and again.

DUST LAYER.—Barrett Mfg. Co., New York and Chicago. Paper; 4¾ × 7½ ins.; pp. 12; illustrated.

In connection with a small amount of advertising, there are here reprinted some extracts from a paper on "The Dust Problem," by J. W. Howard, as read before the American Road Makers' Association.

PNEUMATIC TOOLS.—The Dayton Pneumatic Tool Co., Dayton, O. Paper, 6¼ × 6¼ ins.; pp. 47; illustrated.

This catalogue gives a detailed and priced list of all the various pneumatic appliances manufactured by the company, among which are hammers, drills, air compressors and holders, sand rammers and hoists.

CONTRACTORS' MACHINERY AND SUPPLIES.—Harold L. Bond Co., Boston, Mass. Paper, 6¾ × 9¾ ins.; pp. 251; illustrated.

Everything in equipment and supplies that a contractor or contracting engineer could possibly want are described in this list. It should be a valuable work for every construction office.

STORAGE BATTERY.—Westinghouse Machine Co., East Pittsburg, Pa. Paper; 4½ × 6 ins.; pp. 50; illustrated.

The Westinghouse arrangement of the "Planté" plate battery is elaborately set forth in text and illustration. The construction of grids is well shown. Commercial applications are very briefly outlined.

MARLIN REPEATING RIFLES AND SHOT GUNS.—The Marlin Firearms Co., New Haven, Conn. 5 × 8 ins.; pp. 136.

This is a new catalogue of a well-known manufacturer of firearms. Besides its contents descriptive of a large variety of arms and ammunition, it contains some useful instructions for the proper use and care of rifles.

STAND-PIPES.—Tippett & Wood, Phillipsburg, N. J. Paper; 6¾ × 10 ins.; pp. 32; illustrated.

This contains illustrations of stand-pipes, water towers, smokestacks and storage tanks already constructed by the company, together with some designs to show the possibilities of an artistic treatment of such structures.

PNEUMATIC TOOLS.—Chicago Pneumatic Tool Co., Chicago, Ill. Paper; 6 × 9 ins.; pp. 96; illustrated.

The special object of this catalogue is to exploit the Chicago Giant rock drills which the company has but recently put upon the market. All the other pneumatic tools made by the company are, however, included within the book.

WATERPROOFING MIXTURE.—Waterproof Concrete and Portland Cement-Lime Mortars. Charles Warner Co., Philadelphia, Pa. Paper; 6¼ × 9¼ ins.; pp. 16; illustrated.

This booklet contains a series of tests for waterproofing qualities, using varying mixtures of hydrated lime and Portland cement. These tests thoroughly cover the tensile strengths and permeability of a great number of mixtures, the object being to determine the most economical mixture to be used to meet any particular requirements in building construction. The hydrated lime used was "Limoid," a patented mixture made by the company issuing the pamphlet.

FASTENERS FOR SECURING SLEEPERS.—Wm. B. Ruddick, 400 East 165th St., New York. Paper; 6½ x 9½ ins.; folder; illustrated.

Bent wire clamps or clips are here illustrated to be inserted in a wet concrete floor and used when the concrete has set, to secure the timber sleepers upon which the flooring rests. Great advantage over the usual methods of holding sleepers is claimed.

FIREPROOF CONSTRUCTION.—The New Century Contracting Co., New York. Boards; 4¾ x 6½ ins.; pp. 20; illustrated.

In this little book the New Century system of fireproof construction is described in a very interesting and pleasing manner. This system has for a basis a hollow tile construction, sometimes in connection with reinforced concrete, sometimes in the steel skeleton system with concrete protection.

CONCRETE SEWER CENTERING.—Blaw Collapsible Steel Centering Co., Pittsburg, Pa. Paper, 6 x 9 ins.; pp. 67; illustrated.

This is one of the best catalogues yet issued by the Blaw Company and by aid of its remarkably well executed illustrations, gives a complete and concise account of the claims of the device for collapsible sewer and conduit centers.

CONCRETE REINFORCEMENT.—The Benney Patent Truss Stirrup. Federal Concrete Steel Co., Pittsburg, Pa. Paper; 3¼ x 6¼ ins.; pp. 8; illustrated.

The truss stirrup here described consists of a bent V-shaped flat bar through holes in the bottom of which plain rod reinforcement can be placed, the stirrup forming the verticals and diagonals in a truss action in which the rods form a bottom chord.

SURVEYOR'S RODS.—W. & L. E. Gurley, Troy, N. Y. Paper; 3½ x 9¼ ins.; pp. 47; illustrated.

To any engineer in charge of work which has the purchase and use of surveyor's rods as part of the routine, this little booklet will be very valuable. In it are illustrated and priced all of the various kinds of rods which are in use. It is the most complete catalogue of the subject which has come to our notice.

WOVEN WIRE FENCE.—American Wire Fence Co., 189 La Salle St., Chicago. Paper; 6¼ x 3½ ins.; pp. 16; illustrated.

The "Model" fence is of high-carbon steel wires which have been coiled so that they will take up contraction and expansion movement, and these are connected by vertical stay wires tied to the longitudinals at each intersection. Weights and prices are given of a variety of styles for railway, farm and other purposes.

PROTECTIVE PAINT FOR METAL WORK. Semet-Solvay Co., 412 Marquette Bldg., Chicago. Paper; 6 x 9 ins.; pp. 4; illustrated.

This crysolite paint is specially intended for bridges and structural iron and steel structures, smokestacks, blast furnaces and machinery, and all forms of iron and steel work that needs to be protected from rust and corrosion due to moisture, acid fumes and electrical currents. Testimonials and a list of users are given.

SNOW PLOWS FOR ELECTRIC RAILWAYS.—Russell Car & Snow Plow Co., Ridgway, Pa. Paper; 11 x 7 ins.; pp. 13; illustrated.

The well-known Russell snow plow is here shown as used on interurban electric railways. There is a brief description accompanied by a number of views of the complete machine, its trucks, plows, etc. Separate sheets show the Russell plow working through snow 8 to 12 ft. deep on the Great Northern Ry., in January, 1907.

WOVEN WIRE FENCE.—Page Woven Wire Fence Co., Adrian, Mich. Paper; 6¼ x 3½ ins.; pp. 32; illustrated.

This fencing is of rectangular mesh, with longitudinal wires that have been coiled so as to act as springs in taking up contraction and expansion. The vertical stay wires are wrapped around each longitudinal. It is made of various sizes and weights for farm, poultry and railway work, being used by both steam and electric railways. Ornamental fences and iron gates are also included.

WIRE FENCING.—Indiana Steel & Wire Co., Muncie, Ind. Paper; 6 x 3½ ins.; pp. 24; illustrated.

The "Indiana," "Hercules" and other special styles of fence have longitudinals of coiled spring steel wire, connected by diagonal stay wires wrapped around them at each intersection. The size of mesh varies in the different styles for railway, farm and poultry fencing. The "Climax" fence has a rectangular mesh, with vertical stays. Iron gates and post-hole augers are also described, and a separate folder gives weights and prices.

ELECTRICAL EQUIPMENT FOR CEMENT PLANTS.—Westinghouse Electric & Mfg. Co., Pittsburg, Pa. Industrial series, No. 13,152. Paper, 6 x 9 ins.; pp. 19; illustrated.

The Bath Portland Cement Co., of Bath, Pa., has lately equipped nearly its entire plant with Westinghouse electrical machinery and this description of the works gives about the best conception of how to install a similar equipment in another plant.

REINFORCED CONCRETE.—Trussed Concrete Steel Co., Detroit, Mich. Paper, 3½ x 6¼ ins.; pp. 38; illustrated.

This book is entitled "Hand Book of Instructions Regarding Material and Workmanship for Superintendents and Inspectors of the Kahn System of Reinforced Concrete." The rules record the highest and best practice in reinforced concrete work and, if conscientiously followed, cannot fail to bring good work.

FORGED STEEL PIPE FLANGES.—American Spiral Pipe Works, 14th St. and 48th Ave., Chicago, Ill. Paper; 8 x 10¼ ins.; pp. 96; illustrated.

This artistic catalogue is a very complete work on forged steel flanges, giving general and detailed information about sizes and applications. Data and dimensions are tabulated throughout. Standard wrought and spiral riveted pipe are briefly discussed at the end of the publication.

RAILROAD ELECTRIFICATION. — General Electric Co., Schenectady, N. Y. Bulletin 4501. Paper; 8 x 10½ ins.; illustrated.

This bulletin gives a description of the electrified system of the West Jersey & Seashore R. R. of the Pennsylvania lines, from Camden, N. J., to Atlantic City. The subheads under which the work is taken up are: General Scheme, Power House, Substations, Inspection Sheds, Third Rail, Trolley, Motor and Control Equipment, Rolling Stock.

TEREDO-PROOF PAINT.—3½ x 5½ ins.; pp. 12. The Teredo-Proof Paint Co., 17 Battery Place, New York City.

It is hard for an engineer to believe that any paint can keep the teredo from attacking wood submerged in Southern tidal waters; but this is the claim that this little pamphlet makes. The claim is backed up by testimonials from engineers and others who have used this paint on dredges, marine railways and other structures in Florida and the Gulf waters. The material appears to have made at least a good enough record to be worth investigation and trial by engineers.

ELECTRICAL APPARATUS.—General Electric Co., Schenectady, N. Y. Bulletins. Paper; 8 x 10½ ins.; illustrated.

Bulletin 4498. The mechanical construction is shown in twelve pages, with diagrams of connections.

Bulletin 4499. Cast Grid Rheostats is the title of this leaflet of four pages.

Bulletin 4510 treats in four pages electrically operated ratchet driven rheostat switches.

Bulletin 4511. In this number, a new line of lightning arresters for medium and high voltage alternating current circuits is briefly shown. This apparatus contains improvements suggested by a year's investigation and experiment.

Bulletin 4493. The 76 pages of this bulletin on "Parts of R Controllers" will be of greatest interest to operating concerns using this control apparatus.

Bulletin 4502. In addition to three pages of description of blade lever switches this bulletin contains 16 pages of tabulated dimensions.

Bulletin 4503. This company is making a line of direct current generators of capacities from 1½ to 17 KW., known as C Q type. The line is especially adapted to any location requiring small belt-driven machines. This bulletin has eight pages devoted to this line.

Bulletin 4508. Since the introduction of inter-pole motors a few years ago their application has constantly become more widespread. The General Electric Co. has now developed a railway motor with such commutating poles. Commutation difficulties are eliminated up to severest overloads. Six pages describe mechanical and electrical construction.

ELECTRICAL APPARATUS.—General Electric Co., Schenectady, N. Y. Bulletins. Paper; 8 x 10½ ins.; illustrated.

Thomson single-phase, high-torque induction wattmeters are described in Bulletin No. 4498. This publication deals with the mechanical and electrical construction of this familiar meter. Three forms are made; one for house installation, known as Type I, and two for switchboard use, one having a metal cover and the other having a glass cover. The bulletin points out such features of merit as accuracy on overloads, inductive load accuracy, accuracy under variations of potential and frequency high as 10%, and ease of calibration for different standard frequencies. A number of connection diagrams and dimension drawings are given, with catalogue numbers, capacities, etc., for the various sizes.

In Bulletin No. 4502, recently issued by the General Electric Co., Schenectady, N. Y., is described the G. E. knife-blade lever switches, Type L, Form D-12, which are claimed to be able to stand severe and continuous service, carry the rated current indefinitely without over-heating, and meet all requirements of the underwriters. Several forms of this line of switches are illustrated in the bulletin and sixteen pages are devoted to dimensional drawings and tables of capacities, catalogue numbers, dimensions, prices, and other data of interest to the constructing engineer and manufacturer.

In Bulletin No. 4507 on electric flat irons, the supply department of the General Electric Company, Schenectady, N. Y., has pointed out many of the general advantages to be obtained in the home, in commercial and hotel laundries, in tailor shops, in factories, by architects and draftsmen, in hospitals, by travelers, etc., from the use of the different types of irons being sold by that company.

Load curves are given, taken from typical lighting stations and showing the increase in output during light load hours due to the installation of electric flat irons on their lines. The heating element is a cylindrical "cartridge" inserted in the iron and built up of an edge-wise wound spiral of special resistance, ribbon insulated between turns and enclosed in a mica-lined copper cylinder. The bulletin gives interior views of laundries and other commercial applications of electric irons, and describes and illustrates the various sizes and types listed, ranging from 3 lbs., 250 watts, to 24 lbs., 1,000 watts.

Bulletin No. 4506 gives information arranged especially for central station managers on the characteristics, rating and operating cost of the "metalized" filament lamp of the 50-watt size.

A supplement to Bulletin 4495 calls attention to a new line of direct current fan motors, made by adapting a universal joint to the motor frame. The motor may be moved in a horizontal or a vertical plane through this joint.

Bulletin No. 4516 describes a complete line of circuit breakers for electric cars. The mechanical and electrical design is briefly described.

For other Proposal Advertisements see pages 55, 56, 57, 58, of Advertisements and Construction News page 16.

CANAL.

Office of the Chief Engineer,
Twin Falls North Side Land & Water Co.
Milner, Idaho, July 1st, 1907.

Sealed proposals will be received at this office until three o'clock P. M., Thursday, August 1st, 1907, for the construction of sixteen (16) miles of canal containing about:

30,000 perch of rough rubble masonry.
25,000 cu. yds. of Lava Rock Excavation.
680,000 cu. yds. of Earth Embankment.

Bids will be received in part or in full per cubic yard or lump sum from responsible bidders.

Instructions to bidders, together with plans, profiles, specifications and form of contract and bond can be seen upon application to the office of the company at Milner. The Engineer in Charge will show the intending bidders over the work.

The right is reserved to reject any and all bids.

By order of the Twin Falls North Side Land & Water Company.

By PAUL S. A. BICKEL,
2-2t Chief Engineer.

WATER-WORKS.

Chesterton, Ind.

Sealed proposals for the complete construction of a system of water-works will be received by the Home Water Company at Chesterton, Indiana, on or before July 20th, 1907. Plans and specifications can be seen at the Chesterton Bank. 2-1t

U. S. ENGINEER OFFICE, New London, Conn., July 11, 1907.—Sealed proposals for dredging in Norwalk Harbor, Conn., will be received here until 12 o'clock, noon, August 12, 1907, and then publicly opened. Information furnished on application. HARRY TAYLOR, Maj., Engrs. 2-4t

STONE ROADS.

Rahway, N. J.

Proposals are asked for the construction of telford and macadam stone roads, on St. George Avenue, from Grand Street southerly to the Middlesex County line and on Leesville Avenue, from St. George Avenue westerly to the Middlesex County line, all situated in the City of Rahway, Union County, N. J.

The above work covers a length of road of about 10,368 lineal feet. The width of the stonework is to be 16 feet.

The estimated quantities of the items of the work are as follows:

Earth Excavation, 2,425 cu. yds.
Earth Embankment, 420 cu. yds.
2-in. Macadam Pavement, 1,222 sq. yds.
6-in. Macadam Pavement, 4[illegible] sq. yds.
12-in. Macadam Pavement, [illegible]159 sq. yds.
12-in. Telford Macadam Pavement, 1,400 sq. yds.
Crushed Stone furnished additional, 700 tons.
3-in. Drain Tile, 4,000 lin. ft.
Rock Excavation, 0.

Plans, profiles and specifications for this work may be examined at the office of the County Engineer, 215 Broad Street, Elizabeth, N. J.

Bidders must enclose with their bids a certified check for $1,000.00, made payable to the Director of the Board of Chosen Freeholders, as a guarantee that if the contract be awarded to such bidder, the bidder will enter into an agreement with the Board of Freeholders for the carrying out of the work.

Bids for this above described work will be received by the County Road Committee of the Board of Chosen Freeholders of the County of Union, at the Court House, Elizabeth, N. J., at 12 o'clock noon on Thursday, August 1, 1907.

The Board of Chosen Freeholders or its Committee reserves the right to reject any or all bids, as they may deem best for the interests of the County.

JACOB L. BAUER,
County Engineer,
2-3t, 215 Broad Street, Elizabeth, N. J.

SEWERS.

Woonsocket, R. I.

Sealed proposals, addressed to the Board of Sewer Commissioners, Woonsocket, R. I., will be received at the office of said Board, City Hall, No. 169 Main Street, Woonsocket, R. I., until 2 o'clock P. M., Thursday, July 18th, 1907, for the following described work:

Estimated Quantities.

About 1,500 feet of 8-inch sanitary sewer.
About 600 cubic yards rock excavation.

Plans and specifications may be seen and blank form of proposal and contract obtained at the office of the City Engineer, City Hall, Main Street, Woonsocket, R. I. Each proposal must be accompanied by a certified check for the sum of five hundred dollars ($500) made payable to the order of Samuel P. Cook, City Treasurer, of the city of Woonsocket, R. I., as surety that if the bid is accepted a contract will be entered into.

The right is reserved to reject any and all bids.

FRANK E. HOLDEN,
GEORGE S. READ,
GEO. H. VALOIS,
Board of Sewer Commissioners.
FRANK H. MILLS,
City Engineer. 2-2t

CONCRETE BRIDGE.

Woodland, Cal.

Sealed proposals in duplicate for building a reinforced concrete bridge over Putah Creek, consisting of three one hundred fifteen foot spans, will be received at Woodland and Fairfield by the Clerks of Yolo and Solano counties up to eleven A. M., August 1st, 1907. C. F. HADSALL,
2-2t Clerk, Yolo County, Cal.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., July 8th, 1907.—Sealed proposals will be received at this office until 3 o'clock P. M. on the 19th day of August, 1907, and then opened, for the Construction, including plumbing, gas piping, heating apparatus, electric conduits and wiring, of the U. S. Post Office at Alexandria, Minnesota, in accordance with drawings and specifications, copies of which may be had at the office of the Custodian of the Site at Alexandria, Minnesota, or at this office, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 2-2t

Situations Wanted

RODMAN—Railroad experience; can run transit and level. NABUT, 740 E. 179th St. 3-1t

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Supplement to

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CONSTRUCTION NEW
Plans and Specifica
List of Contracts
Railways .....
Electric Railways
Light and Power
Bridges .....
Buildings .....
Water Supply and
Sewerage .....
Streets and Roads
Manufacturing Pla
Miscellaneous Cont
Contract Prices
U. S. Possessions
CIVIL SERVICE EX
TRADE PUBLICATIO
PROPOSALS .....

CONSTRUCT

PLANS AND SPECI

(* *denotes that this*
Engineer

The following Plans
(S.) are on file and m
of The Engineering
220 Broadway, New Y

7-18 Repairs, Wash.,
7-20 Dredging, Char
7-20 Blasting, Portar
7-20 Sewers, Pensac
7-20 Trav. crane, Br
7-24* Dredging, Jack
7-27 Dry dock, Bre
7-25 Coal pocket, C
.....
7-20* Filters, West P

LIST OF CONT

LIGHT, HEAT AN

7-18 Wiring, etc., N
7-20 Wire, Wash.,
7-22 Equipment, etc
7-30 Equipment, C
8- 1 Lighting, Han
8-31* Lighting, Leb
9- 3* Power plant,

BR

7-18 Masonry, Kitta
7-18 Bridge, Wilke
7-18 Plank, New Y
7-18* Bridge, Ft. S
7-19 Bridges, Troy,
7-20 Bridges, Byro
7-20 Bridges, Port
7-20 Bridges, Culp
7-20 Bridge, Wawa
7-22 Bridges, etc.,
7-22 Bridge, Chill
7-22 Superstrs., etc
7-22 Bridge, Ogden
7-22 Bridge, Oakla
7-22 Bridge, San J
7-25* Bridge, etc.,
7-27 Culvert, Cleve
7-27 Bridge, Elber
7-29 Bridges, Clev
7-29 Bridge, Wich
7-29 Bridges, etc.,
7-29 Abutments, P
7-30 Bridge, New
7-30 Superstr., H
7-31* Bridge, Glen
7-31* Superstr., Ha
8- 1* Bridge, Woo
8- 1* Viaduct, East
8- 2 Bridge, Port
8- 2 Bridges, Sur
8- 3 Superstr., Sh
8- 3 Abutment, Ch
8- 5 Superstr., Tr
8- 5 Bridge work,
8- 5 Bridges, Van
8- 5 Bridge, Rom
8- 5 Bridges, Jac
8- 6 Bridges, Cov
8-10 Bridge, etc.,
8-15 Bridges, Jac
8-20* Bridges, Por

7-18 Court-house,
7-18* Post-office,
7-18* Heating, etc
7-18 Repairs, etc
7-18 Public bath,
7-19 Sheds, New
7-22 Hospital, N
7-22 Schools, New
7-23 Heating, etc
7-24* Post-office,
7-25 Building, D
7-25 Skylight, et
7-28 Repairs, W
7-29 Court-house
7-29 Public bath
7-30 Laundry (M
7-31* Floors, etc
7-31* Shelves, W
7-31* Post-office,
8- 1 Plans, Calg
8- 1 Bank, Kno
8- 5 Post-office,
8- 6 Buildings, N
8- 7 Cathedral,
8-12 Post-office,
8-19* Post-office,
8-19* Post-office,
8-22 Post-office,